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An Address.[1]

THE ROLE OF THE PROFESSION IN HOSPITALS.

By LEONARD BALL,

Retiring President of the Victorian Branch of the British Medical Association.

IT has been an honour to be your president during the last twelve months; 1953 will long be remembered by me as a happy, interesting and busy year, and I should like to express my sincere thanks to you all for the loyal support given to me and to our Association during this time. Many presidents have preceded me, many more will follow, and I trust those of tomorrow will be as great as, if not greater than, those of yesterday; for big changes are taking place in the profession and in our relationship to the community—we have ceased to be a race apart and the essential nature of our work is being realized. Instead of being considered a luxury, we are now regarded almost as a public utility, and there is the ever-present danger of being controlled by politicians and of our services being sold to the public. Our present actions are most important, and we must realize that on the foundations we lay will be built the future structure of the profession.

[1] Delivered at the annual meeting of the Victorian Branch of the British Medical Association on December 2, 1953.

This is not the place to be technical and speak of one's own particular branch of medicine, so I should like to confine my remarks to observations on our present hospital problem and the place our profession should take in it.

When we talk of medicine, of the profession, of the advances we are making in research and the improved services available to the sick, we think of our hospitals. In Victoria we are very proud of them; but in recent months these hospitals have been getting more than their fair share of publicity. The Press and the radio have been full of news about hospitals—special appeals for them, special debates for them in the State Parliament, and competition by various centres for bigger and better hospitals; and the public seems to like it, too; the subject of hospitals has become almost as regular a topic for conversation as the weather. There is fierce rivalry between local authorities to produce the most elaborate hospital, more especially as the hospital boards of management are not now responsible for the raising of money to build or maintain them. In Victoria big hospitals are planned in which are used more chrome, more plate glass, more rubber and huge quantities of builders' hardware. Architects are rushing on world tours to "get ideas" for the huge hospitals they hope their firm will be asked to design and plan. Many will be monuments in concrete without regard to efficient working.

Britain has given the profession much in the past, and we in Victoria are proud to be a Branch of the British Medical Association. On the clinical side, perhaps, Britain's greatest contribution has come from its hospitals and the

work done in them. Of these, the London hospitals are the most widely known and many of us have visited and worked in them. I would think that of the general hospitals Guy's Hospital, Saint Bartholomew's Hospital and the Middlesex Hospital are the most famous. Among the hospitals doing a special branch of surgery Saint Mark's Hospital would be a good example, and of a purely specialized hospital, Moorfields, devoted entirely to eye work. Of these, only the Middlesex Hospital has a reasonable building when judged on modern standards—it was built in the 1930's. Guy's Hospital building is 250 years old, and was so badly damaged by air raids that it barely hangs together. St. Bartholomew's Hospital is over 100 years old, and Saint Mark's Hospital and Moorfields were built in the middle of the last century. However, the medical staff of each of these is first class, and in spite of some difficulties and inconveniences, they produce magnificent work—comparable with the best in the world. There are dozens of similar hospitals in London—to mention only a few, Saint Mary's Hospital, University College Hospital, Saint Thomas's Hospital, Charing Cross Hospital—and in the provinces and in Edinburgh, where the patients are well looked after, where the work and equipment are good and the buildings are poor. Despite the state of the building, work in all these hospitals is of the highest standard.

During a short trip to the United States last year I visited medical centres in Boston, the Lahey Clinic, Chicago, and the Mayo Clinic at Rochester. I found the buildings there not at all modern or impressive, nor was a great stress laid on them. But who can question the high standard of surgery at these places?

With this emphasis on building has come an equally strong emphasis on hospital administration and administrators. We meet these administrators under a variety of names. Sometimes they are hospital managers; in the small hospitals, particularly in the country, they are secretaries; in some of the larger hospitals they assume the title of chief executive officer. However, the title matters little, as the regulation under the *Hospitals and Charities Act* states that the secretary shall be the chief executive officer. These regulations, too, make it virtually impossible for a doctor to be the chief executive officer. Moreover, there is no provision in the Victorian Act for a doctor to be a member of the Hospitals and Charities Commission, although there has always been one. We are very gratified that recently a doctor has been appointed chairman; but medical representation should be a right rather than, as at present, an act of grace.

On one side we have the clamour by the public and politicians for larger hospitals; on the other, the steady growth in power and authority given to hospital administrators. The pair seem to be integral pieces to the present-day hospital picture; but unlike the jig-saw, which needs many pieces to make its picture complete, only two are needed for the hospital picture—more hospitals and more administrative control. Now the problem is, where do we, as a profession, fit into this picture?

It has been argued that the chief executive officer is quite capable of running a hospital, that he is an expert administrator and a skilled accountant and can employ medical advice. Similarly, it could be argued that medical knowledge is the more important of the two, so why cannot a doctor run the hospital and employ accountancy and administrative advice? When army hospitals were first established they were under the command of combatant officers; but since the turn of the century medical officers have commanded service hospitals and this policy has proved most effective in peace and war. I have served in many of the Australian Imperial Force hospitals and never found evidence of poor administration. Many members of the profession feel there is too much lay control in our hospitals; but probably a good deal of this is our own fault, as we have perhaps not fully accepted responsibilities in this direction.

The bulk of my medical work has been at the Alfred Hospital. I entered there as a medical student in 1920 and have been associated with it ever since. So please forgive me if I single out the Alfred Hospital to illustrate a point. When this hospital was founded in 1869 it had the following objects: (i) to care for the sick; (ii) to teach students; (iii) to promote research work. These seem to be reasonable objectives for any hospital; but we must determine which is the most important—the caring for the sick, the teaching of students or the research work, with all its hopes for the future. The relative importance of these objectives may vary with different hospitals; for example, some hospitals teach not only students and nurses, but physiotherapists, dietitians, almoners and X-ray technicians, in addition to taking part in post-graduate teaching. Others have large research units, but basically the most important job for any hospital is to care for the sick. Buildings, although necessary and important, are not of paramount importance. No hospital is better than the medical staff that runs it. If we fall down on our job the hospital becomes inefficient no matter how fine and stately it looks from the outside or how much publicity it has received during and after construction. We are the backbone of the hospitals, and many of them are being built without due regard to whether an efficient medical staff will be available to work them. Without an adequate medical staff, the bigger the hospital, the greater menace it may become. As Sir William Osler said: "Show me the medical staff of a hospital and I will tell what sort of a hospital you have."

But here in Victoria still the clamour for hospitals continues, little thought or little attention being given to the medical staff that will care for its patients. Hospitals have become a vital political issue. Many members of Parliament have retained their popularity through promises of new hospitals or efforts to make existing hospitals more elaborate. There are indications today that the Hospitals and Charities Commission and the State Government are doing some hard thinking on this vital problem, and I feel that the public is realizing at last that a hospital is no more efficient than the medical staff that attends it.

As new hospital projects are put into operation without the importance of the medical staff being fully appreciated or understood, I wonder if some of this attitude is not our own fault. We have a naturally conservative outlook and a certain reluctance to make a nuisance of ourselves; but we must be willing to accept the responsibility imposed on us by new hospitals and wider medical schemes. Neither can succeed without our active help and cooperation, and it is primarily to our profession that the public must look if it is to have the best medical service available. In Victoria we still have the honorary system for the treatment of patients at public hospitals, and there seem to be some doubts as to whether this can survive. Our Council has stated in its policy that it is opposed to the extension of honorary services. We may be faced with the task of formulating a system of payment for services rendered in public hospitals on a sessional or salaried basis, and we believe that the best treatment is given by a part-time visiting medical staff rather than by those employed in a full-time salaried service.

Having then assumed the major responsibilities in a hospital service, we must make it quite clear by our outlook and by our actions that we are fitted for this great work, and by continued self-discipline and rigid self-examination see that we maintain the great traditions of the profession.

We have a duty to our patients and we must be very sure that we fulfil that duty, whether it is in hospital or private practice. Probably the most valuable asset in our practice is the trust our patients put in us as individuals. It is rather curious that many patients have a complete faith in their own doctor and frequently a profound distrust of the profession as a whole, and it is this doctor-patient relationship that means so much to a patient when he is ill. With the growth of group practice these personal ties may be weakened and sometimes in hospital work they may not exist; but it is possible to maintain them in all conditions of practice, and we should see that they are kept strong. During our student days it was necessary for us to become familiar with morbid states, both structural and functional. We were then told of our future responsibilities, and we felt proud that we were entering a worthwhile

profession which gave us such knowledge to help others. We must always keep to these ideals of service. The practice of medicine, involving as it does the processes of change in human beings, can be successfully accomplished only by the training of our senses in close and continuous observation of the patient, either at the bedside or in the home. There is a tendency to regard a patient merely as "that interesting case of jaundice in the second bed on the right in Ward 3", and then there may develop a lack of interest in those patients whose symptoms, after careful study and investigation, do not appear to rest on any structural or physical abnormality. I think many of us who are perhaps not giving the profession of our best fall into the error of saying "there is nothing the matter with him" and dismissing the case from our minds. Each patient who is seeking advice does so because he is in a state of disease or hopes for relief. The assurance that he is not suffering from cancer or heart disease, although gratifying, is of secondary importance if his symptoms persist. Is it any wonder that these patients turn to osteopathy, herbalism or Christian Science in search of relief? Dr. Leslie Hurley, in an address to our Branch late in 1947, stated that there was an increasing body of opinion, both in Australia and in other parts of the world, that there was a deterioration in clinical ability and a weakening of personal relationships between doctor and patient, both of which were fundamental to sound medical practice. It is a great temptation, when a patient is admitted to hospital, to write up a series of forms for multiple investigation, particularly when such investigations are free (to the patient) and easy to obtain, and to feel then that our responsibility has ended. Many of the investigations asked for may be unnecessary or indeed misleading; but having in due time received the results, we make the diagnosis entirely on laboratory findings which are regarded as being above criticism. This attitude is encouraged in certain quarters, where such reports are regarded as of more significance than a sound clinical opinion; but what a waste of laboratory work and X-ray films!

If we care to examine ourselves critically we may find that we are unconsciously weakening the doctor-patient relationship or neglecting our patients just as much by too great a reliance on investigations as by too much social pleasure; but the ultimate result is the same and the good name of the profession suffers either way. To quote again from Leslie Hurley's 1947 address:

> From a scientific point of view there is no fundamental difference between information gained by history taking and the unaided senses and that obtained by the use of some special instrument or machine. Science resides in the intellect and not in the machine, and a careful and correctly interpreted clinical examination is just as scientific as an observation made by some special method. Both are liable to human error and may be scientific or unscientific according to their accuracy and to whether they are logically or illogically interpreted. This is no criticism at all against correct information obtained from the laboratory or the specialist. Such information is exceedingly valuable and of vital importance. There is, however, a tendency to neglect or even distrust information gained by the ordinary bedside examination and to exempt from criticism that obtained by special methods.

Contrary to an accepted opinion in some sections of the profession, it is not the function of the laboratory to make the diagnosis. This should be made by the doctor in charge of the patient, who alone is in possession of all the information and who should be in the best position to interpret the facts, place them in proper perspective and then attempt to make an accurate diagnosis. Frequently, as many of us no doubt have found out, a laboratory or clinical finding, even though correct, has no bearing on the patient's symptoms.

We cannot expect to create skilful practitioners in the five or six years allotted to the medical curriculum. Medicine is not a trade to be learned, but a profession to be entered. It is an ever-widening field that requires continued study and prolonged experience in close contact with the sick. When we consider the amazing progress of science in its relation to medicine during the last few decades and the enormous mass of scientific material which must be made available to the modern physician, it is not surprising that the medical schools have tended to concern themselves more and more with this phase of the educational problem. While they have been absorbed in the difficult task of digesting and correlating new knowledge, it has been easy to overlook that the application of the principles of science to the diagnosis and treatment of disease is only one limited aspect of medical practice. The practice of medicine in its broadest sense includes the whole relationship of the physician with his patient; it is an art based on the medical sciences, but comprising much that still remains outside the realms of any science. The art of medicine and the science of medicine are not antagonistic, but supplementary to each other.

Everybody, sick or well, is affected in one way or another, consciously or subconsciously, by the material and spiritual forces that bear on his life, and especially to the sick such forces may act as powerful stimulants or depressants. When the general practitioner goes into the home of the patient he may know the whole background of the family life from past experience; but even when he comes as a stranger he has every opportunity to find out what manner of man his patient is, and what kind of circumstances make his life. He gets a hint of financial anxiety or of domestic incompatibility; he may find himself confronted by a querulous, exacting, self-centred patient or by a gentle invalid overawed by a dominating family, and as he appreciates how these circumstances are reacting on the patient he dispenses sympathy, encouragement or discipline. What is spoken of as a "clinical picture" is not just a photograph of a man sick in bed; it is an impressionistic painting of the patient surrounded by his home, his work, his relations, his friends, his joys, sorrows, hopes and fears. Now, all of this background of sickness which bears so strongly on the symptomatology is likely to be lost sight of in hospital. I say "likely to" because it is not by any means always lost sight of, and because I believe that by making a constant and conscious effort one can almost always bring it out into its proper perspective. The difficulty is that in the hospital one gets into the habit of using the oil immersion lens instead of the low power, and focusing too intently on the centre of the field.

Here, then, is a great group of patients in which it is not the disease but the man or the woman who needs to be treated. In general hospital practice physicians are so busy with the critically sick, and in clinical teaching are so concerned with the training of students in physical diagnosis and attempting to show them all the types of organic disease, that they do not pay as much attention as they should to the functional disorders. Many students enter practice having hardly heard of them except in their psychiatry lectures, and without the faintest conception of how large a part they will play in their future practice. At best their method of treatment is apt to be a cheerful reassurance combined with a placebo. The successful diagnosis and treatment of these patients, however, depend almost wholly on the establishment of that intimate personal contact between physician and patient which forms the basis of private practice. Without this it is quite impossible for the physician to get an idea of the problems and troubles that lie behind so many functional disorders. If we are to be skilled in this field of medicine we must also be given opportunities to build up the same type of personal relationships with our patients.

And so, as we examine ourselves just a little more closely, perhaps our own house is not in order. As I said earlier, maybe the trouble lies in our intense desire to gain more and more scientific knowledge, at the expense of our patients and our own efficiency, or taking things just a little too easily and treating our patients with little or no humanity or understanding.

Time, sympathy and understanding must be lavishly dispensed; but the reward is to be found in that personal bond which forms the greatest satisfaction in the practice of medicine. One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient. The foundations of clinical medicine were securely laid over 2000 years ago

by Hippocrates, who, by his case histories and bedside teaching and his accurate observations and high ethical standards, gave us a lead for all to follow. Let us never forget the Hippocratic oath, with its emphasis on dignity and, above all, responsibility.

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PEABODY, F. W. (1927), "The Care of the Patient", *J.A.M.A.*, 88: 877.
HURLEY, L. (1948), "The General Practitioner and the Specialist", M. J. AUSTRALIA, 1: 66.

COMPARISON OF DIFFERENT TYPES OF X-RAY FILMS FOR CASE FINDING AND DIAGNOSIS OF SILICOSIS.

By D. O. SHIELS and D. L. G. THOMAS,
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IN any X-ray survey of persons working in the dusty trades, two important aspects require investigation—namely, the effectiveness of the type of film used in revealing abnormalities in the chest, and the correctness of the estimate made by the person who views the film.

Recent work in England (Fletcher and Oldham, 1949) has shown the great differences between the estimates by different observers of the condition revealed by a particular film, and between the estimates by the same observer of the same film viewed before and after an interval of some months.

In a large-scale X-ray survey the cost of large films (17 inches by 14 inches) may be a serious matter. In circumstances wherein this cost may be prohibitive it is important to know whether the smaller films (35 or 70 millimetres) give X-ray pictures which are sufficiently revealing to be of value for preliminary case finding, even though not satisfactory from the point of view of final X-ray diagnosis.

It has been, apparently, fairly generally accepted that the 35-millimetre film, while useful and widely used in mass X-ray surveys for finding tuberculosis, is not satisfactory for finding cases (especially early ones) of silicosis.

In order to throw further light on these matters, 67 persons had X-ray pictures taken on 35-millimetre and 70-millimetre films, and the same 67 with five others had pictures taken on 17-inch by 14-inch screened films and on 17-inch by 14-inch unscreened films.

The details of the radiographic technique were as follows:

1. For 35-millimetre films "Ilford HPX" film was used. Exposures were taken at a focal screen distance of three feet at 90 kilovolts and 200 milliamperes, a photo-electric exposure timer being used. Exposures ranged from about 10 to 30 milliampere seconds.

2. The 70-millimetre films were "Ilford GX" films, taken at 85 kilovolts and 30 milliamperes at a distance of 30 inches with a mirror camera system and photo-electric timing.

3. Non-screen direct radiographs were taken on "Kodirex" film at 85 kilovolts and 200 milliamperes at a distance of four feet, with exposures of 10 to 30 milliampere seconds.

4. The screened films were "Kodak Blue" brand, "Ilford" fine-grain screens being used with exposures at 200 milliamperes for one-twentieth of a second at a distance of four feet, with the voltage adjusted from 55 to 70 kilovolts according to chest thickness.

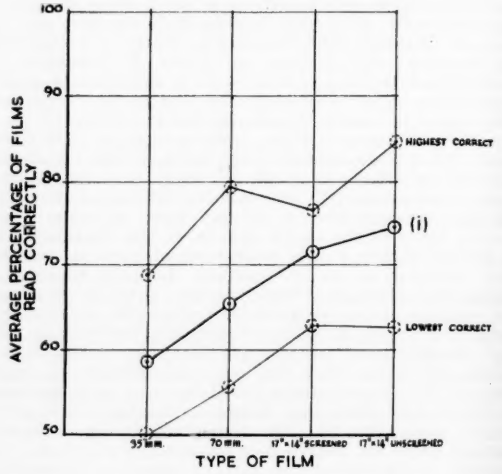
For the first, third and fourth groups a two-millimetre rotating anode focal spot was used, whilst for the second group the focal spot area was 1·5 millimetres.

The technical conditions under which all these radiographs were taken were such as to provide the utmost detail in the radiographs.

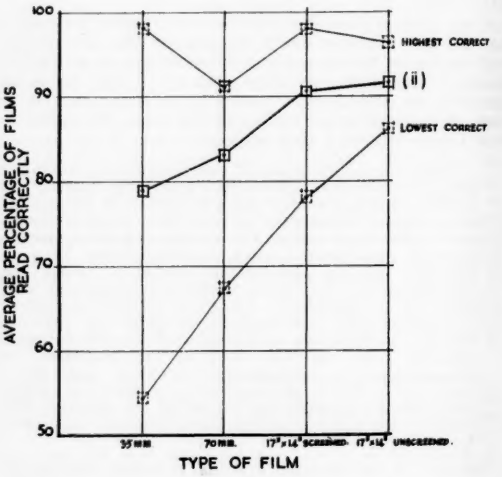
The technical standard of the films taken in this survey was of a very high degree of excellence, and much higher than the standard normally achieved in a mass X-ray survey.

Thus the results of the comparison in this survey might not be achieved in another if such a high technical standard was not maintained.

The persons selected had all been originally picked out as showing some abnormality on 35-millimetre films in a mass X-ray survey. Some of them had become normal at the time of these later tests.



(i)



(ii)

FIGURE I.
(i) Any "abnormality or normality" (see text).
(ii) Silicosis or suspected silicosis.

Each set of films was examined by five radiologists, with an interval of several weeks between the sets.

Reference was by numbers, no names or medical or occupational histories being supplied to the observers.

The results of each set were collected from the observers as completed, in the form of original manuscript notes.

Each person's number was the same for all films.

All the radiologists were men of many years' general experience as consulting radiologists. Some had had a

TABLE I.

General Assessment of "Abnormalities and Normalities" According to Reference Diagnosis.

Observer Number.	Type of Film.							
	35 Millimetres. (67 Films.)		70 Millimetres. (67 Films.)		17 by 14 Inch, Screened. (72 Films.)		17 by 14 Inch, Unscreened. (72 Films.)	
	Number Correct.	Percentage Correct.	Number Correct.	Percentage Correct.	Number Correct.	Percentage Correct.	Number Correct.	Percentage Correct.
1	37	55·2	42	62·7	55	76·4	61	84·72
2	40	59·7	42	62·7	54	75·0	56	77·77
3	33	49·3	53	79·1	54	75·0	57	79·16
4	36	53·73	37	55·2	45	62·5	51	70·83
5	46	68·65	41	61·2	48	66·6	45	62·5
6	42	62·7	47	70·15	54	75·0	52	72·2
Highest percentage correct	68·65		79·1		76·4		84·72	
Lowest percentage correct	49·3		55·2		62·5		62·5	
Range	19·35%		23·9%		13·9%		22·22%	
Average percentage correct	58·21		65·17		71·75		74·53	

great deal of experienec in reading the 35-millimetre films from the mass X-ray survey, but none had had the intensive experience of reading industrial chest X-ray films possessed by those who have served for years on silicosis or pneumonokoniosis boards in populous coal-mining or metalliferous mining areas—for instance, in Great Britain, South Africa or New South Wales.

A sixth observer, not a radiologist, also examined all the films. He had, however, had considerable experience in viewing chest X-ray films of persons who had been exposed to dust. In the case of this observer, the 35-millimetre films were examined on one afternoon and the next morning; the 70-millimetre films were examined on the day after the morning session; and the 17-inch by 14-inch screened films were examined on the day after that. The 17-inch by 14-inch unscreened films were examined a couple of months later. The times taken by this last observer on each radiograph averaged about four and a half minutes for the 35-millimetre films, about two minutes for the 17-inch by 14-inch screened films, and an intermediate time for the 70-millimetre films.

No attempt was made by this observer at a subsequent viewing to remember what his opinion on any particular film had been at a prior viewing, and it can be stated with confidence that in only a very few cases did he happen to remember what his previous opinion had been.

At the time of his examinations he was not aware of the opinions of the radiologists.

He understood that the films represented cases of pneumonokoniosis (silicosis *et cetera*) and normal subjects and had no idea of the relative numbers of each. He did not know, until after he had assessed the films, that all the subjects had originally been picked out in the mass X-ray survey as showing some abnormality.

Method of Arriving at Reference Diagnosis.

The majority verdict of the six observers, together with the verdict of the medical officer who had examined all the persons concerned and obtained their occupational and medical histories, was taken as the reference diagnosis.

In all but a few cases the majority verdict agreed with the verdict of this officer. In those few instances in which it did not, the verdict of this officer was taken as the standard.

Of the 67 films, 46 were of persons with silicosis of varying degrees of severity, some with tuberculosis in addition, 12 were within normal limits; one showed siderosis, one fibrosis and asthma, one chronic fibrosis, and two increased linear markings, whilst four were "doubtful". The additional five of the larger films (17 inches by 14 inches) were all of subjects of silicosis.

Results.

The results of the survey are shown in Tables I to V and in Figures I to IV.

TABLE II.

Assessment of Definite or Suspected Silicosis or Other Abnormality Suggesting Need for Further Radiological Examination in Regard to Pneumonokoniosis.

Observer Number.	35 m.m. Film: 67 Films: 46 Silicotics.				70 m.m. Film: 67 Films: 46 Silicotics.				17 by 14 Inch Screened Film: 72 Films: 51 Silicotics.				17 by 14 Inch Unscreened Film: 72 Films: 51 Silicotics.			
	Definite.	Suspected.	Total.	Percentage Correct.	Definite.	Suspected.	Total.	Percentage Correct.	Definite.	Suspected.	Total.	Percentage Correct.	Definite.	Suspected.	Total.	Percentage Correct.
1	23	2	25	54·4	28	11	39	84·8	44	3	47	92·1	46	3	49	96·1
2	23	14	37	80·4	26	11	37	80·4	40	0	40	78·4	44	2	46	90·2
3	27	6	33	71·5	40	2	42	91·3	46	2	48	94·1	46	2	48	94·1
4	27	11	38	82·6	27	11	38	82·6	33	11	44	86·4	37	8	45	88·3
5	30	9	39	84·8	25	6	31	67·4	35	15	50	98·0	32	12	44	86·2
6	38	7	45	97·82	39	3	41	91·3	46	2	48	94·1	46	2	48	94·1
Highest percentage correct	98				91				98				96			
Lowest percentage correct	54				67				78				86			
Range ..	44				24				20				10			
Average percentage correct	78·58				82·97				90·5				91·5			

The expression "abnormalities or normalities" does not refer to appearances not relevant to the present discussion, such as enlarged cardiac shadow *et cetera*, but to the presence of silicosis or pneumonokoniosis, tuberculosis, fibrosis of doubtful origin, or the absence of any such changes.

Table I shows that there was a very low average percentage of correct verdicts on the 35-millimetre films, and that even in the 17-inch by 14-inch unscreened films the reading was not really good. Figure I shows these average values and also the highest and lowest percentages of correct verdicts. The differences between the highest and lowest correct verdicts show no consistent variation as one passes from the 35-millimetre to the 70-millimetre films, and thence to the 17-inch by 14-inch screened films and to the 17-inch by 14-inch unscreened films in that order.

One observer (number 5) had a higher percentage of correct verdicts on the 35-millimetre film than on any of the other films read by him (68·7%, 61·2%, 66·6%, 62·5%). Also he had a higher percentage of correct verdicts on the 35-millimetre films than three other observers had on the 70-millimetre films and than one other had on the 17-inch by 14-inch screened films.

Table II shows considerably better scores in all types of film. There is not much difference in the average percentages of correct verdicts on the large films (90·5% and 91·5% respectively), or in the verdicts on the two small types of film (78·58% and 82·97% respectively). If one excludes the very poor score of observer number 1 with the 35-millimetre film, then there is no significant difference in the average percentages of correct verdicts on these small films—namely, 83·4% and 82·97%.

There is an increase in the percentage of correct verdicts from the 35-millimetre films to the 70-millimetre films, to the 17-inch by 14-inch screened films, and to the 17-inch by 14-inch unscreened films, with a definite decrease in the difference between the highest and lowest percentages of correct verdicts as one passes from one type of film to the next.

These points are illustrated in Figure I.

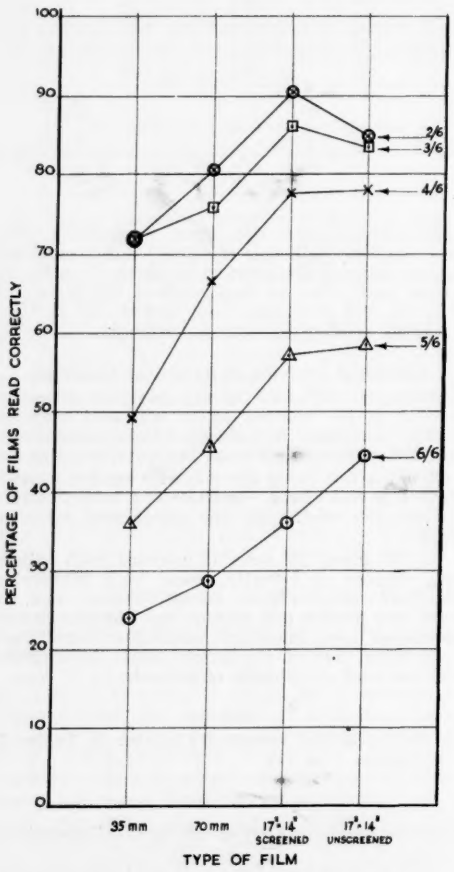


FIGURE II.
"Abnormalities or normalities."

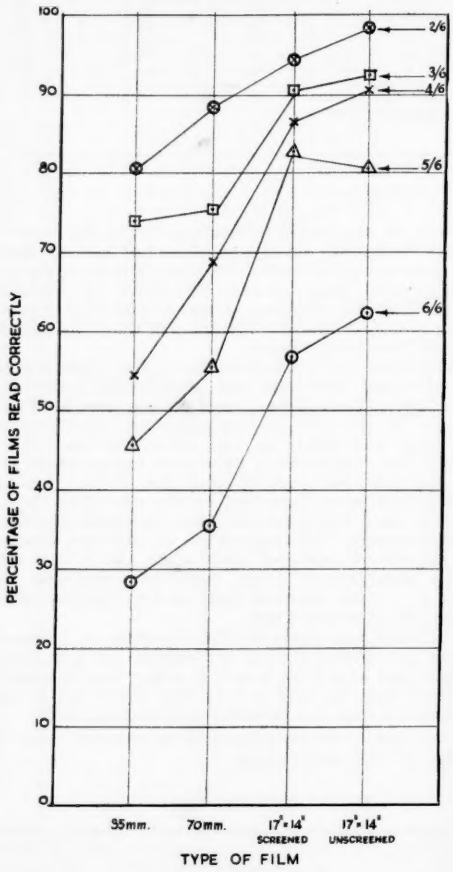


FIGURE III.
Silicosis *et cetera*.

One observer (number 2) scored as high a percentage of correct verdicts on the 35-millimetre film as he did on the 70-millimetre film, and a higher percentage than he did on the 17-inch by 14-inch screened film, and a higher percentage than one other observer on the 70-millimetre film.

Observer number 4 on the 35-millimetre film did as well as or better than two others, including himself, did on the 70-millimetre film, and better than one other on the large screened film.

Observer number 5 did as well as or better than four others, including himself, on the 70-millimetre film and better than one other on the 17-inch by 14-inch screened film.

Observer number 6 did better on the 35-millimetre film than six others, including himself, on the 70-millimetre film, and better than five others, including himself, on the 17-inch by 14-inch screened film, and better than all six, including himself, on the 17-inch by 14-inch unscreened film.

Discussion.

Although the results of this study reveal the superiority of the 17-inch by 14-inch unscreened film for silicosis case finding, they by no means indicate that for specific purposes in industry the 35-millimetre film is useless.

Admittedly, some observers achieved a poor score of correct readings with this film. On the other hand, several observers achieved very good scores indeed with it.

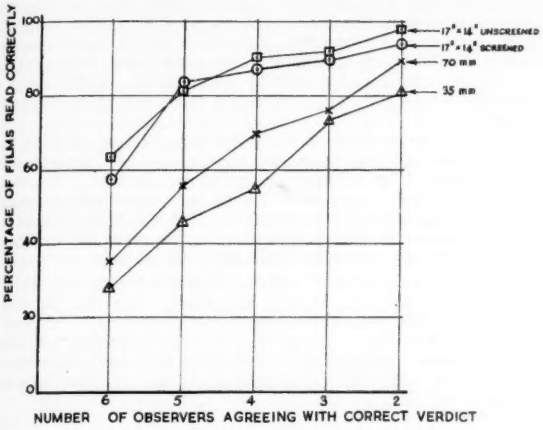


FIGURE IV.
Silicosis and suspected silicosis *et cetera*.

In the usual technique of reading the small film in a mass X-ray survey for tuberculosis, the observer spends very little time on each film, reading, say, 350 films in four hours.

In an X-ray survey of a particular firm's employees conducted, say, by an industrial hygiene division with a view to finding silicosis, the number of employees may be relatively small (say 100), and there is no reason why considerably more time than that indicated above could not be given to viewing each film.

Moreover, even if the 35-millimetre film is not ideal for finding the very early cases, it must be remembered that such a survey may have as its object the general assessment of the conditions in the particular works as to whether or not there are any definite cases of silicosis among the employees, and not the finding of absolutely every case even in the very earliest stages. If, in a certain factory wherein there was some supposed silicosis hazard, and 50 of the employees had been engaged for twenty years or so and no silicosis could be detected among them on the 35-millimetre film by observers numbers 5 and 6, then one would be justified in concluding that a significant silicosis hazard did not exist there.

In conducting a pneumonokoniosis X-ray survey in any particular industry or factory, one has general knowledge of the presence of some hazard, though not necessarily of its intensity, and one is, of course, on the look-out specially for signs of pneumonokoniosis in the films. This is not the case in a broader X-ray survey for tuberculosis, wherein no particular attention can be paid, in the reading of the films, to the occupation of the subject; a foundry worker or ex-miner may be among dozens of persons who are or have been exposed to no dust hazard at all.

Thus in the former case one might reasonably expect to miss fewer cases of pneumonokoniosis than in the latter.

It is not contended that for diagnostic purposes in an individual case of suspected silicosis one would rely on the 35-millimetre film any more than one would do so in the case of a suspected case of tuberculosis.

TABLE III.

Showing the Percentage of Films of the Different Sizes on which Different Numbers of Observers Agreed as to the Correct Verdicts in Regard to any "Abnormality or Normality".[1]

Number of Observers Correct Out of Six.	Films on which Observers Agree as to Correct Verdict.			
	35 m.m.: 67 Films.	70 m.m.: 67 Films.[2]	17 by 14 Inch Screened: 72 Films.	17 by 14 Inch Unscreened: 72 Films.
Six	16 (23·8%)	19 (28·8%)	26 (36·0%)	32 (44·4%)
Five or more ..	24 (35·8%)	30 (45·45%)	41 (56·94%)	42 (58·23%)
Four or more ..	33 (49·2%)	44 (66·6%)	56 (77·7%)	56 (77·7%)
Three or more ..	48 (71·5%)	51 (76·1%)	62 (86·1%)	60 (83·3%)
Two or more ..	48 (71·6%)	53 (80·6%)	65 (90·3%)	61 (84·72%)

[1] The results shown in Table III are plotted in Figure II. This table illustrates the general superiority of the large films, a larger number of observers giving a larger percentage of correct verdicts on the 17 by 14 inch unscreened films than on any other films.

[2] Five observers did not read one film, owing to a technical fault in film.

TABLE IV.

Showing the Percentage of Films of the Different Sizes on which Different Numbers of Observers Agreed as to the Correct Verdicts in Regard to Silicosis or Suspected Silicosis or Pneumonokoniosis Requiring Further Investigation.[1]

Number of Observers Correct Out of Six.	Films on which Observers Agree as to Correct Verdict.			
	35 m.m.: 46 Films.	70 m.m. 46 Films.[2]	17 by 14 Inch Screened: 51 Films.	17 by 14 Inch Unscreened: 51 Films.
Six	13 (28·3%)	16 (35·5%)	29 (56·56%)	32 (62·74%)
Five or more ..	21 (45·65%)	25 (53·5%)	42 (82·35%)	41 (80·4%)
Four or more ..	25 (54·35%)	31 (68·88%)	44 (86·27%)	46 (90·2%)
Three or more ..	34 (73·9%)	34 (75·55%)	46 (90·2%)	47 (92·16%)
Two or more ..	37 (80·43%)	40 (88·8%)	48 (94·31%)	50 (98·04%)

[1] The results shown in this table are plotted in Figures III and IV. Like Table III, this table illustrates the general superiority of the 17 by 14 inch unscreened film.

[2] Five observers did not read one film, owing to a technical fault in film.

TABLE V.

Assessment of Any "Abnormality or Normality".[1]

Proportion of Correct Readings.	Number of Observers.			
	On 35 m.m. Film.	On 70 m.m. Film.	On 17 by 14 Inch Screened Film.	On 17 by 14 Inch Unscreened Film.
60%	2	5	6	6
70%	0	2	4	5
75%	0	1	2	3
80%	0	0	0	1

[1] Tables V and VI again illustrate in a general way the superiority of the larger films over the smaller, and further, the superiority of the unscreened large film over the screened film.

Again, the large films are costly, and if the alternative to taking the large film is to do nothing at all, owing to lack of funds, the opportunity of doing very useful work may be missed if the view is accepted that the 35-millimetre film is of no value.

It is admitted that the field selected for testing was not ideal for deciding the relative merits of the different sized films, though satisfactory for showing the differences in the assessments by different observers. There were not so many normal findings and not so many very early lesions, compared with the number of definite silicotics, as one would desire for the first purpose.

If one of the observers had classed every one of the 35-millimetre films as showing silicosis, he would have been correct in regard to all the silicosis films and would have been correct in 68·6% of cases in regard to any normality or abnormality, but would have "over-read" the silicosis cases by 31·4%.

Actually, observer number 6, who scored best for the 35-millimetre film, classed 47 of the films as showing silicosis or suspected silicosis—70·15%; that is, he "over-read" in regard to silicosis by 1·5%—not a serious matter.

It is hoped to do further work in comparing the usefulness of the 35-millimetre and 70-millimetre films with that of the large films with a wider field containing relatively more normal subjects, and also with a number of employees in occupations among whom early cases can be expected.

TABLE VI.

Assessment of Silicosis or Suspected Silicosis or Pneumonokoniosis Requiring Further Investigation.[1]

Proportion of Correct Readings.	Number of Observers.			
	On 35 m.m. Film.	On 70 m.m. Film.	On 17 by 14 Inch Screened Film.	On 17 by 14 Inch Unscreened Film.
60%	5	6	6	6
70%	5	5	6	6
75%	4	5	6	6
80%	4	5	5	6
85%	1	2	5	6
90%	1	2	4	4

[1] Tables V and VI again illustrate in a general way the superiority of the larger films over the smaller, and further, the superiority of the unscreened large film over the screened film.

Summary.

The assessments by six observers (including five consulting radiologists) of 67 35-millimetre and 70-millimetre films, of which 46 were films of silicotics, and of 72 17-inch by 14-inch screened films and 17-inch by 14-inch unscreened films, of which 51 were films of silicotics, have been compared.

The films were read by five of the observers at intervals of several weeks between the readings of the different-sized films.

The observers had no knowledge of the names or the medical or occupational histories of the subjects.

The results indicate very considerable differences of opinion.

Generally the order of usefulness for the finding of silicosis was as follows: 35 millimetres, 70 millimetres, 17 inches by 14 inches screened, 17 inches by 14 inches unscreened, in ascending order.

It is concluded that with certain observers, and when adequate time is given to viewing each film, the 35-millimetre and 70-millimetre films may both be very useful in X-ray surveys in dusty trades for silicosis case finding.

Acknowledgements.

Our thanks are due to and gratefully rendered to Dr. C. E. Eddy, Director of the Commonwealth X-ray and Radium Laboratory, for helpful discussions, and to himself and to members of his staff for taking all the films, for details of the radiographic technique employed, and for the loan of viewing equipment for the 35-millimetre and 70-millimetre films; to the persons who agreed to be radiologically examined; and especially to the consulting radiologists, who generously gave their time and submitted their findings for analysis.

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"LAUDOLISSIN": A LONGER-ACTING MUSCLE RELAXING AGENT.

By C. A. SARA, S. V. MARSHALL and A. P. BALTHASAR,
Sydney.

IN the recent development of a new group of synthetic muscle-relaxing drugs there emerged only two agents which merited clinical trial. These were known respectively throughout the investigation as Compound 15 and Compound 20. Evaluation of the former by Bodman showed that the side effects were so great that it was soon abandoned. These side effects (palpitation, tachycardia, flushing, headache) were considered to be due to histamine release.

A clinical impression of the latter drug, Compound 20, is now presented. The preparation is marketed as "Laudolissin Methosulphate" by Allen and Hanburys, Limited. "Laudolissin" is the registered name of decamethylenebis (1:2:3:4-tetrahydro-6:7-dimethoxy-1-(3:4-dimethoxybenzyl)-2-methyl isoquinolinium). The iodide, bromide and methosulphate are the forms suitable for clinical use.

One of the alkaloids of opium, laudanosine or n-methyltetrahydropapaverine, closely resembles one-half of the molecule of the dimethylether of tubocurarine. "Laudolissin" is essentially prepared from laudanosine as the polymethylene bisquaternary salt. This synthetic procedure has obvious economic advantages, since the substances used are all readily available in the United Kingdom.

Physical Properties.

"Laudolissin" is supplied as a colourless transparent solution in ampoules, each containing 30 milligrammes of the active salt in a volume of 1·5 millilitres. The pH of the solution is 5·0, and it is incompatible with thiopentone in any proportion. On such admixture an initial opalescent precipitate is formed, which with increasing concentration of "Laudolissin" becomes heavy and falls to the bottom of the test tube. In its clinical administration, then, the agent involves the same technical difficulties as the use of most curare preparations.

Clinical Investigation.

In the investigation of any muscle-relaxing agent the following aspects should be considered, and these were kept in mind during this study: (i) mode of action; (ii) efficacy of antidote (if any); (iii) duration of effect; (iv) effect on respiration; (v) potentiation by anæsthetic agents; (vi) side effects: (*a*) autonomic blocking effect, (*b*) capacity for histamine release, (*c*) other peculiarities.

Premedication.

For this investigation the premedication was standardized as much as possible. At all times it was considered to be light. It consisted usually of "Nembutal", one and a half grains, and morphine, one-sixth of a grain, with atropine, 1/150 of a grain, given respectively one and a half hours and three-quarters of an hour before the operation. Some patients received the equivalent in "Omnopon" and scopolamine only. Children, "poor risk" patients and urgent surgery necessarily required modification of this schedule.

Dose and Effect.

This agent was used in 100 cases,[1] in which the age range was from two to seventy-two years. Table I shows the type of surgical procedures that were performed.

For an average subject, two of us administered 30 milligrammes as the initial dose. This was reduced for "poor risk" patients and children. Two examples of this smaller dosage were as follows: (i) a child, aged two years, undergoing lobectomy was given six milligrammes; (ii) a frail, hemiplegic woman, aged sixty-nine years, suffering from a strangulated hernia, was given 15 milligrammes.

[1] Since this article was submitted for publication a further 70 cases have been added to the series.

For very robust patients, especially when sustained quiescence of the diaphragm was required by the surgeon, one or more supplementary doses of "Laudolissin" were often necessary. In such additional or repeated dosage, especially during prolonged operations, it was found that increments of 15 milligrammes were sufficient to maintain satisfactory operating conditions.

The other member of this team used smaller initial doses than those quoted above, generally of the order of 10 to 15 milligrammes. These were often adequate for the shorter operations—for example, appendicectomy. However, it was found that for longer procedures and for upper abdominal surgery the frequent repetition of the same dose was required to maintain good relaxation.

The deduction, therefore, is that for an operation of any great magnitude, particularly one that is to be performed in the upper part of the abdomen, it is better to administer a larger initial dose. Further, in the conduct of "controlled respiration" it was found essential that such a dose be given. An added advantage of the larger initial dose is that more time is available for the agent to be metabolized, so that there is less likelihood of cumulation with residual paralysis at the end of the operation. The maximum amount of "Laudolissin" used on any one patient in this series was 74 milligrammes, given over a period of 190 minutes.

TABLE I.

Procedure.	Number of Cases.	Procedure.	Number of Cases.
Gynæcological section ..	31	Inguinal herniorrhaphy (strangulated hernia) ..	1
Cholecystectomy	29	Incisional herniorrhaphy	1
Thoraco-lumbar sympathectomy	4	Freeing of adhesions ..	1
Gastrectomy	9	Intestinal volvulus ..	1
Exploratory laparotomy	4	Vagotomy (abdominal) ..	1
Ano-rectal surgery (hæmorrhoids *et cetera*) ..	4	Thyroidectomy	1
Appendicectomy	3	Prostatectomy	1
Pulmonary lobectomy ..	3	Oral procedure (dental clearance)	1
Cholecystotomy	2	Ligation of *ductus arteriosus*	1
Diaphragmatic herniorrhaphy	1	Nephrectomy	1

The onset of relaxation with "Laudolissin" was slow as compared with that produced by "Scoline" or curare, reaching a maximum at three to five minutes. There was no preliminary phase of muscular twitching or fasciculation, as seen with the "depolarizing" agents. Coinciding with the peak of muscular paralysis there was nearly always some respiratory depression. When the larger initial dose was used, apnœa lasting some five to ten minutes was usual, after which breathing of steadily increasing amplitude became restored. The respiratory depression gave an indication of the effectiveness of the drug in producing muscular paralysis. As with other relaxing agents, it was evident that profound relaxation must involve severe respiratory depression. And although shallow breathing may accompany good relaxation, the need for proper manual aid to respiration was still imperative. The respiratory embarrassment was, of course, intensified by the Trendelenburg position or deep anæsthesia.

Duration of Effect.

In this series of cases "Laudolissin" at all times produced good muscular relaxation. There was no failure in effect and no need for exceptional dosage in any instance.

It was found that, with the concomitant use of anæsthetic agents other than ether, the duration of action of "Laudolissin" was at least one-third longer than that produced by equipotent doses of *d*-tubocurarine. No case of hypersentivity to the drug was observed. When allowance was made for the longer duration of its effect, no instance of unduly prolonged respiratory paralysis occurred.

The general object in this study was so to regulate dosage that efficient breathing would be restored by the end of the operation, thus obviating the necessity for an antidote. In some instances, however, the operation terminated before adequate respiration had returned, generally because the surgical procedure originally intended was not performed. Neostigmine administration readily overcame such residual effects (*vide infra*). When the relaxing effect had passed off either naturally or with the aid of neostigmine, the restoration of muscle tonus was permanent.

Cumulation.

No serious cumulative effects were seen in this series. When another dose of "Laudolissin" was administered within the active period of the initial dose, the effect was one of simple cumulation. However, if this supplementary dose was administered after the effect of the first had worn off, no cumulation occurred; there was no reactivation of the agent.

Coincident Anæsthesia.

"Laudolissin" was employed with all the anæsthetic agents in common use. Further, all the common sequences were tried in association with this agent. Necessarily, of course, apparatus suitable for lung ventilation was used in these combinations.

In such circumstances the transition to a full ether anæsthetic was found to be smooth and without incident. For this reason the exact duration of action of "Laudolissin" was somewhat difficult to assess when it was used with ether. However, on patients who were maintained in a light plane of ether anæsthesia, and in whom the return to consciousness occurred within a few minutes of cessation of administration of the anæsthetic, its effect was notably prolonged. It appears, then, that as with curare there is a potentiation of the muscle-relaxing effect when supplementary ether is used. Conversely, in patients already under the influence of ether, quite small doses of "Laudolissin" were remarkably effective.

Intubation.

Although "Laudolissin" will produce adequate relaxation of the jaw muscles and suppress respiration, it does not provide such ideal conditions for intubation as does "Scoline". Under its influence the vocal cords may be seen in variable positions, but at all times respond actively to local stimuli.

Use with Other Relaxants.

Since "Laudolissin" is a true curarizing agent it was expected that succinylcholine and decamethonium, like neostigmine, would reverse its muscle-paralysing effect. Pharmacological investigations supported this possibility, but on trial in practice variable results were obtained. In some cases both respiration and muscle tone were adequately restored; in others the response was temporary, and the subsequent use of neostigmine became necessary. Apparently the depth of residual curarization was important in this regard; when it was shallow the procedure was often quite effective. Another feature of possible value was that a moderate excess of either succinylcholine or decamethonium, used thus would provide good relaxation for wound closure and yet ensure the speedy restoration of muscle tone. The problem warrants further clinical study, for if the depolarizing agents could be substituted, as antidotes, for the current routine of atropine and neostigmine, the various undesirable side effects of the latter sequence would be avoided.

In this series "Laudolissin" was frequently used to maintain muscular paresis after the administration of succinylcholine or decamethonium, either for intubation or for initial surgical relaxation. No significant antagonistic effects accompanied this procedure; on the contrary in most subjects it seemed to enhance the relaxation, so that smaller dosages of "Laudolissin" were required for maintenance purposes. This apparent potentiation was more obvious after the preliminary use of decamethonium, and so the possibility of its occurrence should not be forgotten when this combination is employed.

"Laudolissin" can be used to supplement the effect of curare, and conversely *d*-tubocurarine can be used to augment the effect of "Laudolissin". In either case, if the effect of one is waning, minimal amounts of the other will restore relaxation.

"Laudolissin" can be used to supplement the effect of curare, and conversely *d*-tubocurarine can be used to augment the effect of "Laudolissin". In either case, if the effect of one is waning, minimal amounts of the other will restore relaxation.

Side Effects.

Histamine Release.—Equipotent amounts of "Laudolissin" and *d*-tubocurarine were injected intradermally, with saline as a control. It was found that this agent was as active as curare in releasing histamine. It must be noted that histamine release in the body by histaminogenic substances is related to the amount administered and to the individual response of the patient. In this series of cases there was no evidence of laryngospasm or bronchospasm attributable to this side action.

Cardiovascular System.—As with other curariform drugs in use, there was some increase of wound oozing. This did not add significantly to the difficulty of the operations. Readings taken during several operations indicated that "Laudolissin" had no significant effect on the blood pressure. There was no post-operative hæmatoma formation or bleeding. In some cases slight but persistent tachycardia was recorded, the maximum pulse rate being 132 per minute. This was not a constant finding, nor was it confirmed by continuous electrocardiographic tracings made in the absence of surgical interference. The tachycardia, then, may in no way be related to the drug, but, on the other hand, may be either a vagolytic effect or due to histamine release, as occurs with similar compounds.

Other Effects.—Post-operative microscopic and chemical examination of the urine showed no abnormalities. Although several "poor risk" patients were included in this series, there were no immediate post-operative deaths.

The Clinical Antidote.

To those patients who at the end of operation exhibited some degree of respiratory depression, neostigmine was given. The reasons for such depression have already been referred to in the preceding paragraphs. Atropine, 1/100 of a grain, was always given some five to ten minutes before the administration of neostigmine, of which 2·5 milligrammes were the usual dose. The response to this treatment was always good, and the restoration of muscle tonus persisted. However, it must not be forgotten that neostigmine is absolutely contraindicated if decamethonium or succinylcholine has been used for terminal relaxation or wound closure. Any residual paralysis must now be due to these latter agents, and not to the "Laudolissin" given earlier. To give neostigmine at this stage would aggravate and prolong the paralysis.

Summary.

1. The clinical use of a new synthetic relaxing agent, "Laudolissin", is described.

2. Trials in 100 cases, covering a fair variety of surgical operations, gave very satisfactory results.

3. The new drug appears to have a somewhat more prolonged action than *d*-tubocurarine, which it closely resembles in other respects.

4. It potentiates remarkably the muscle-relaxing properties of ethyl ether.

5. As with curare, neostigmine is a prompt and efficient antidote.

6. In addition the possible antagonistic effects of both succinylcholine and decamethonium are discussed.

7. The constancy of action of the new agent was a striking feature.

8. No deleterious effects, either immediate or remote, were experienced after its use.

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POSTURE.

By DAVID H. TRIBE,

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SELDOM has any subject of such everyday and universal applicability to practical living been neglected as crassly as has posture. Defined by the "Shorter Oxford English Dictionary" as the relative disposition of the various parts of anything, especially the position and carriage of the limbs and the body as a whole, the term "posture" includes the whole gamut of human activity. Specialist interest in this subject is the province of many professions—those of the medical man, the artist, the actor and the professional model, the physical culturist, and the *costumier*. This article attempts to deal with the chief aspects of posture of concern to the anatomist, the physiologist and the orthopædic surgeon.

Plato once said that the "most beautiful motion is that which accomplishes the greatest result with the least amount of effort". This concept of efficiency is the life-blood of the study of posture—that is, good posture. The unfortunate demonstrations of faulty posture that we see in infinite number and variety around us spring from a host of seemingly unrelated influences, educational and mechanical. A study of this subject can best be undertaken by a consideration of the three elementary attitudes: (*a*) walking (including the derived activities of running and mounting stairs); (*b*) standing; (*c*) sitting.

Walking.

To Leonardo da Vinci appealed the idea that the centre of gravity of the body was the prime consideration of human movement. He wrote:

> A man, in going upstairs, involuntarily throws so much weight forward and on the side of the upper foot as to be a counterpoise to the lower leg, so that the labour of his lower leg is limited to raising itself . . . . Observe the perpendicular line below the centre of gravity of the man. [Line of gravity; see Figure I.]

He observes also:

> A man who is mounting any slope finds that he must involuntarily throw the most weight forward on the higher foot, rather than behind—that is in front of the axis and not behind it. Hence, a man will always, involuntarily, throw the greater weight towards the point whither he desires to move than in any other direction. The faster a man runs, the more he leans forwards towards the point he runs to and throws more weight in front of his axis than behind.

Persons running pursue their centres of gravity, and the further the centre of gravity is in front of the supporting foot, the faster the person is running; hence in Figure II, B will catch A.

Let us consider a person standing with feet together, weight evenly distributed. Unless he is compelled to march, as he steps out with, say, his left leg, his motion will usually be observed to commence not with concentric contraction of the right hip flexors acting from their origins, but with a bending forward of the body at the hip joint till the tendency of the line of gravity to fall outside the supporting feet causes a protective reflex thrust forward of one of the feet (the choice being in part a conditioned reflex, in part cortically determined), so that the weight is borne evenly over an anterior and a posterior foot. It is likely that this bending forward at the hips is not due to concentric contraction of the hip flexors from their insertions, but to relaxed antigravity tonicity of the hip extensors. For continued movement the posterior (right) leg must now provide a thrust (or rather be provided with a thrust by the friction reaction of the ground, which by the Newtonian laws equals the action of the plantar flexors) to provide momentum for the centre of gravity to be carried over the anterior (left) leg and beyond for the process to be repeated.

However, kinæsiologists and physiotherapists outgrew Leonardo's centre of gravity conviction and explained everything in terms of muscle movement, somewhat as follows. Consider a subject standing with his weight equally on both feet: before a step is taken, the weight is transferred to one leg. As soon as the weight is transferred, the abductors of that hip go into action to prevent the pelvis from dropping to the unsupported side (weakness here is Trendelenburg's sign). The pelvis is thus kept level, partly by the abductors of the supporting side, and also by the side flexors (*erectores spinæ, quadratus lumborum*) of the opposite side (a form of crossed extensor reflex). The above-mentioned muscles work concentrically to make the movement, then statically to hold it. To step with the free leg, the hip flexors work concentrically to bring the thigh forward, the knee is bent by its own weight, and the ankle is slightly plantar-flexed. The knee is then extended (quadriceps and momentum), the dorsiflexors work concentrically to clear the ground, then statically while the heel is placed on the ground. The forefoot is lowered by the dorsiflexors working eccentrically, and the quadriceps act statically to keep the knee straight. Simultaneously, with the lowering of the heel and the forefoot's coming in contact with the ground, the plantar flexors of the supporting (right) leg contract strongly, raise the heel and push off so that the weight of the body is now pushed forward over the anterior (left) leg. The extensors of the hip and knee of the posterior (right) leg also work. Once the weight is over the forward (left) leg, the right knee relaxes, the right hip flexors bring the thigh forward and the process is repeated. While the moving leg (left) is advancing, the pelvis is rotated to the side of the supporting (right) leg, rotating round the stationary head of the right femur. The muscles producing this movement are the inward rotators of the right hip and the outward rotators of the left hip. Because of this rotation of the pelvis to the side of the posterior leg, the trunk rotators of the opposite side have to work to keep the body facing forward in the line of progress (unless the subject is a mannequin). In this example, the trunk rotators to the left must work, the chief being the left internal and the right external oblique abdominal muscles. The arms swing with the trunk—that is, the trunk is rotated to the left, the left arm swings backwards, and the right arm swings forwards. Except in such exaggerated forms of walking as marching, very little muscle work is required for this, as momentum carries the arms. In addition, the antigravity muscles—the extensors of the hip and knee of the standing leg, the extensors of the spine and head, controlled by the *rectus abdominis*, and the prevertebral muscles—act statically to maintain the upright position.

FIG. I
(After Leonardo)

Recently the pendulum has swung back to Leonardo's conception, and walking is now regarded as a reflex action due to the movement of the centre of gravity.

Metheny has elaborated the following four principles of walking, elementary, yet frequently flouted:

1. *The trunk should be balanced in the pelvic basin and* the head and shoulders balanced on the trunk.

2. *Motion should originate* in the hip joint, not the neck (the "bull-at-a-gate" walk).

3. Apply the force in the direction in which you wish to move—that is, *swing the leg straight ahead, and set* the foot down pointing straight ahead, to receive weight along the line of motion. (Since the effective force equals the gross force multiplied by the cosine of the angle which the latter force makes with direction of motion, instruction is but a further illustration of our original concept of efficiency.)

4. Apply the force directly through the centre of gravity; that is, the trunk should form a continued straight line with the back leg, so that the push-off force is directed through the weight line, and the centre of gravity of the body and all its force will be utilized to move the body diagonally upward and forward over the leading leg. Though the push-off force establishes a momentum which is directed through the centre of gravity, neither it nor the weight-bearing line is directed through the centre of gravity, for the abductors of the supporting side act statically after an initial small concentric contraction. Thus the position is shown by (*b*), not (*a*), in Figure III. (When the subject is in the upright position, the centre of gravity is about two inches above the level of the acetabula. By the law of moments, for equilibrium, $Ay = Wx$. For the evenly poised walker the values of these quantities are the same when the weight is transferred to the opposite leg.)

Wood Jones has contributed to our knowledge of the function of the foot in walking. The digital flexors are actively involved because the toes have to be stabilized by obtaining a grip on the surface; the function is hampered by hard-soled footwear. The flexors of the hallux contract powerfully but statically. The hallux is used as a lever pressed in its whole length against the supporting surface. The flexors of the foot provide propulsion, and the extensors exert traction from insertions to origins, pulling the leg forward (the excursion of the talus in its

FIG II
(After Leonardo)

socket is 15°). The better the muscles of the hallux (especially the abductors) are developed, the greater its stability and the less its mobility. If the phalanges of the hallux cease to be stabilized by being pressed against the ground during the final push-off, the weight of the body falls onto the head of the second metatarsal (then the third), which is anterior to that of the first, and may be thus fractured in prolonged marching on a muscularly weak foot.

Any street will furnish excellent examples of caricatures of walking. Some are due to carelessness, some to temperament or present emotions, some are considered fashionable.

There are two principal walking fashions of elegant society.

Ellis stated that the toes should touch the ground first, and this is regarded as the hallmark of good breeding by some teachers of deportment. Not only is this contrary to the instincts of every race (which indeed is small criterion), but it is most illogical not to proceed with the weight-bearing area advancing from posterior to anterior, so that the mass of the body may the sooner be brought

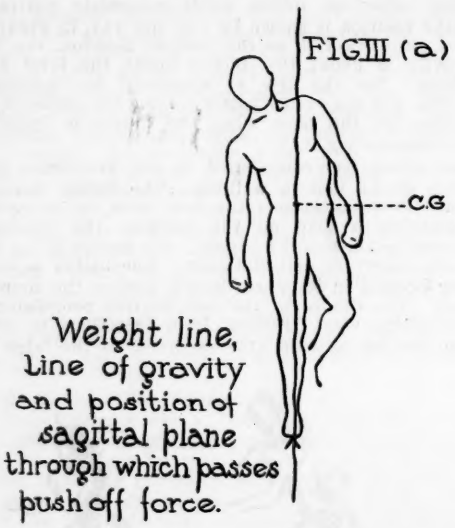
over its sustaining column. Modern dancing recognizes *that one can step more easily, and indeed further, if the* weight is first received on the heel.

The other fashion is expressed by Peter Camper:

> The toes of gentlemen should always be turned out, those of peasants, and particularly of boatmen, are always turned in.

If the foot is turned out, the *peroneus longus* is relaxed *and its effect of stabilizing the hallux is lost. Provided* that the inturning is not accompanied by eversion, which is unlikely, the boatmen are probably better off from the *pedal viewpoint than the valgoid gentlemen.*

The most vivid and enlightening summary of defective *walking is provided by Metheny. (i) Charlie Chaplin:*



talus valgus; (ii) "cute thing": *talus varus*; (iii) rhumba: pelvis oscillates; (iv) "eager beaver": hips, shoulders and arms swing in all directions; (v) "nervous Nelly": similar to (iv), but the arms swing from the elbows and the shoulders are stiff; (vi) "peg-leg": the weight is carried so far backward that the knee-joint is hyperextended; (vii) "splash-kick": as the foot pushes off there is a slight twist on the ball of the foot, which moves the heel laterally, internally rotates the hip, and splashes the trouser leg; (viii) "ankle-kick": as foot pushes off, the heel is twisted inward; (ix) "upsy-daisy": the head rises and falls; (x) "looking-for-pennies-on-pavement": danger of falling forward; (xi) "I-don't-care".

It will be seen that walking with a book on the head is a useful corrective, for such a feat is wellnigh impracticable for all the foregoing, with the possible exclusion of (i) and (ii).

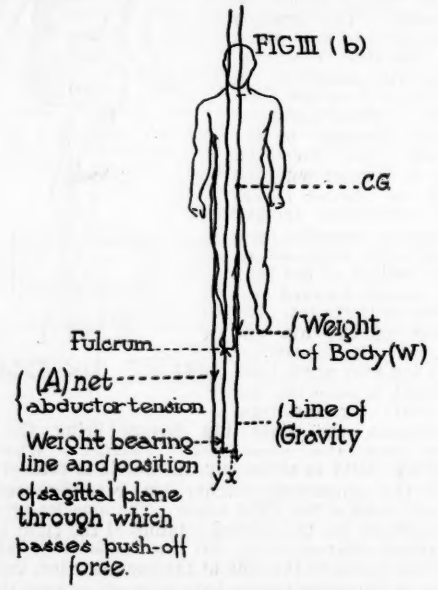
No discussion of walking would be complete without a mention of women's high heels. Unless the subject has a calcaneal spur, these heels are highly undesirable. These unfortunate women spend the standing and ambulatory phases of their existence on an incline of the order of 30°. There is a tendency to fall forward, so the knees are locked, the hips are thrown back, and lordosis of the thoraco-lumbar part of the spine results. The heel strikes the ground earlier than normal and has less area of weight support.

Standing, and Rising from Sitting.

Let us consider first rising from sitting. This is impossible if the trunk is at right angles to the thigh, which in turn is at right angles to the leg (Figure V). The moments of all the operative forces act anti-clockwise about the fulcrum, and ensure that the seated posture is maintained.

Thus, in the act of rising it is necessary to move either *the weight forward over the base, or the base back under* the weight; usually both movements are performed together. The redisposition of moments is indicated in *Figure VI. It will be seen that K.E. is the most important* element of this force complex.

Myologically, there is at first a concentric contraction of the hip flexors, followed at once by eccentric work of the hip extensors as the trunk leans forward, to prevent col*lapse of the trunk onto the knees. The feet are tucked* under the chair by contraction of the knee flexors, and usually the plantar flexors operate to raise the heels. The extensors of both hips and knees go strongly into action (the amount depending on the position assumed and the *gravitational moments resulting therefrom), and with con*centric contraction in the inner range (as is often cited). The extensors of the back, neck, head and prevertebral *muscles work statically. The plantar flexors contract* eccentrically to ensure basal stability and gradually to bring the heel down onto the ground. The prime movers (extensors of knee and hip) are interesting. The knee extensors, of course, contract concentrically from their insertions, but a study of the gluteal region explains how



they act in the face of enormous opposing forces. Henry adds the following contribution to the usual explanation of rising:

> For leaving seats (or mounting stairs) taking a fixed and distal point in front, at the insertion of the iliotibial tract upon the front of the tibia, the *gluteus maximus* (which, incidentally, may be noticed to be remarkably sluggish in movements such as walking, where it might be expected to be quite active), probably acts by helping to effect the raising of the pelvis and the femur forward, strapping each to each in such a way as to combine great solidarity with requisite mobility. Thus it maintains the body mass at every stage in levitation, while the quadriceps, relieved of strain, procures the movement up and forward. The final straightening of the limb is achieved by semitendinosus which is attached anterior to the axis of knee rotation and "locks the joint home".

A biped is in a delicate position from a viewpoint of balance. The human being standing erect would, if an inert mass, be very close to a condition of unstable equilibrium (when a body fails to return to its original position after being disturbed slightly). As the human being is not inert, it has two other properties: (*a*) it can change its shape, and thus alter the position of its centre

of gravity, which follows the direction in which it bends; and (*b*) owing to the presence of the dynamic tissue known as muscle—the flexors, extensors and abductors of the trunk—the human form can place itself into positions of unequivocal unstable equilibrium without toppling over. However, as this requires tonic contraction of large muscle groups, it is rapidly fatiguing and such positions are soon abandoned, so that the very condition of standing is a guarantee of fair, if not excellent, posture.

Although in standing the weight of the body appears to rest on the postero-inferior portion of the calcaneum, the heads of the metatarsals (especially the first and fifth) and the base of the fifth metatarsal, the arches of the foot are so cunningly contrived that the weight is in fact distributed over all the pedal bones. Thus, when Leonardo states that "the centre of gravity of a man who lifts one of his feet from the ground always rests on the centre of the sole of the foot [he stands on]", although this statement is not literally true (Figure III), a recognition of the basic architecture of the foot is appreciated.

Standing, of course, requires the static contraction of the extensors of the hip and knee and the plantar flexors to prevent the subject from collapsing at the limb joints. Most important of these, and usually regarded as the muscle of reflex standing, is the quadriceps. These anti-gravity muscles are operated by the subtle stretch reflex, whereby any tendency towards collapse of the joint involved leads to stretching of the muscles, which stimulates the annulo-spiral, and especially the flower-spray endings and the Golgi tendon organs, and initiates the trigger pull of reflex contraction which steadies the joint. However, such reflex tone is not sufficient to assist venous return to the heart, and standing for long periods at attention results in hypotensive syncope unless there is periodic, isometric contraction of the muscles of the calf and the hamstrings (which are strategically situated round the principal veins of the lower limb).

FIG IV Progress of weight bearing area during walking (After Wood Jones)

A quadruped has the advantages of thoracic and abdominal support for his viscera, of simple, direct nature. Vividly has it been described how, when primitive man assumed the upright posture (if the theory of evolution is accepted), his shoulders slumped, his chest was sunken, his abdominal muscles were slack, he had difficulty in digesting his food, his feet hurt, his back ached, his head slouched forwards and his buttocks back, and he was irritable and restless and suffered from insomnia. Millions of years of physical adaptation and education have soughed over the personalities of some individuals and caused never a ripple.

The vertebral column is a true supporting column. It is not just a "backbone", but is centrally situated in the trunk (and is even slightly forward of the centre of the body at the level of the hips). The spine is thus balanced about the line of gravity, in the erect position. This column is capable of bearing enormous longitudinal stresses, and bone and cartilage are practically insensitive to strain and fatigue. Thus the "backbone" is intended as a support and not merely as a leverage for muscles. At the base of the column is the sacrum; the word itself means "a sacred thing"; the bone was often used in pagan religious ceremonies and was early recognized as the key to erect posture and carriage. Once the trunk is erectly poised, only tonus and not fatiguing contraction of the body muscles is required. Thus, standing is a matter of controlling the curvature of the spine to bear the longitudinal forces and preventing the collapse of the joints of the lower limb. The ability to carry weights is more spinal poise than muscular power.

Muscular contraction does not entirely counteract the action of distorting forces, such as exist in standing on one foot, when applied for a considerable period of time. Andry

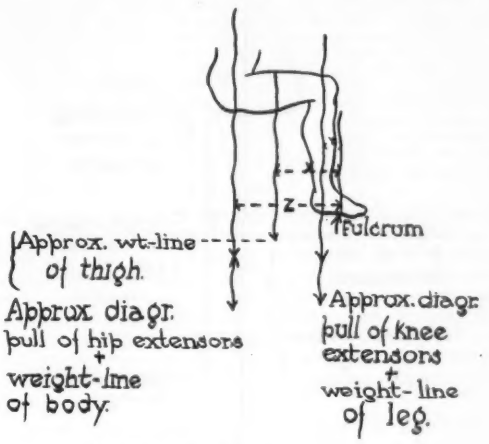

Approx. wt-line of thigh.
Approx diagr. pull of hip extensors + weight-line of body.
Fulcrum
Approx. diagr. pull of knee extensors + weight-line of leg.

FIG V Sitting

was the first to put this to practical purpose when he wrote:

> If a Child inclines his Shoulders too much to the right Side, make him support himself upon the left Foot.

Again:

> Another method of managing a Child when he either raises or depresses one Shoulder too much, is to put some sort of Burthen upon the Shoulder that is lowest, and let the highest quite alone; for the weight upon the low Shoulder will oblige him to raise it up, and at the same time will make him depress the other.

The explanation is obvious (like Leonardo, he too disregards the force exerted by the abductors):

> The Shoulder that carries a Burthen rises always higher than that which is not loaded, and hence the central Line of all the Weight, both of the body and the Burthen, passes through the Leg which sustains the Weight. If the Case was not so, the Body must tumble. But Nature has provided against this Inconveniency, by making an equal part of the Weight of the Body to be thrown to the side opposite to that upon which the Burthen is laid, which makes the Equilibrium; so that the Body is thereby obliged to stoop so low on that side which is not loaded, till it bears an equal Share of the Weight that is upon the other side; when it happens that the Shoulder which is loaded rises up, while the other which is free of the Burthen falls lower.

The greatest danger of faulty standing—prevalent among policemen and shop assistants—is flat foot. Weakness of the ankles and knock-knees (*genu valgum*) are the immediate predisposing causes. The leg is displaced inward, so that the weight falls upon the inner side of the foot. The leg is rotated inward, so that the crest of the tibia falls not over the second toe, but inside the hallux. Thereupon the normal tendency of the talus to slip down and in about the calcaneum is exaggerated, and the medial longitudinal arch is in time depressed. Accompanying this medial rotation of the talus is a reactive rotation of the calcaneum, which produces as sequelæ weakness of the

calcaneo-navicular, deltoid and interosseous ligaments, and a forcing down and out of the anterior foot bones, which leads to depression of the lateral longitudinal arch and the transverse arch. The story of the flat foot is now complete.

Sitting.

Much of what has been said about standing applies also to sitting, but with greater poignancy, for modern life is essentially sedentary, and not only does sitting provide the greatest facilities for execrable posture, but it is a luxury daily indulged in by more people for longer periods.

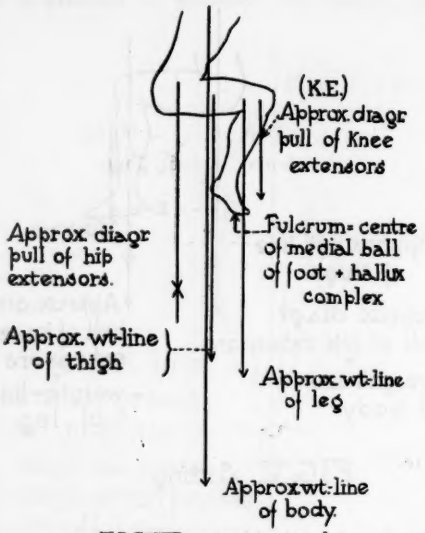

(K.E.)
Approx. diagr pull of Knee extensors
Fulcrum = centre of medial ball of foot + hallux complex
Approx. diagr pull of hip extensors.
Approx. wt-line of thigh
Approx. wt-line of leg
Approx. wt-line of body

FIG. VI. Before rising

"The tree grows as the twig is bent"; faulty posture is too frequently indelibly learnt by the child in the classroom (a further proof that nothing is forgotten with more difficulty than a bad habit). But the danger is especially great to females, because of physical nature, temperament and the function of maternity.

We sit on our ischial tuberosities, which function like the rockers of a rocking chair. In the erect posture, the line of gravity of the trunk passes roughly through the vertebral column centre and is prolonged through the ischial tuberosity coronal plane. Figure VII shows the geometry of the erect posture.

Figure VIII shows what forces act when the body is slumped in a chair. The line of gravity falls far behind the ischia. Moments act first round the ischia, forcing the sacrum down and the ischia forwards till the weight rests on the yielding coccyx, which is pushed into the lower pelvic cavity (as illustrated). The moments forcing the pelvis further forwards then are equal to *Wx*. As the pelvis passes anteriorly, so the weight moment is increased and a cycle is set up. The friction of the seat and fatiguing muscular contraction prevent the body from lapsing into a yielding mass of protoplasm in the bottom of the chair. The superior surface of the sacrum becomes horizontal, and the 70° angle between the lines from the seventh cervical vertebra and the pubis, and the umbilicus and tip of the coccyx, is completely lost.

The lumbar curvature is straightened out or becomes concave anteriorly. This involves a sharp forward bending of the entire upper part of the spine and the head to preserve balance. The vertebral column ceases to consist of four alternating curves and becomes a single forward concavity, with the line of gravity a bow-string to it, as it were. The pelvic inlet becomes almost horizontal.

The principal muscles involved in sitting erect are the long back muscles—the *erectores spinæ*. They keep the pelvis erect, preserve the forward inclination of the superior sacral surface and maintain the lumbar curve; and by drawing down the ribs posteriorly they elevate them anteriorly (rotation being about a transverse axis at the costo-vertebral joints), and thus the sternum is elevated and the chest is expanded. The cervical muscles maintain the cervical curve. The trapezius maintains the scapula against the back. The intercostal and abdominal muscles assist to maintain vital capacity and intraabdominal tension. The psoas and *quadratus lumborum* help maintain the lumbar curvature. With the trunk erect, the shoulders of their own weight hang down and back (aided by contraction of the lower trapezius fibres). The glutei do not act during sitting, because pressure from below pushes them up against the coccyx and against the pelvic diaphragm. When the body is in an erect posture, only tonus, and not fatiguing contraction of these muscles, is required to maintain it. Otherwise the muscles, besides being required to contract actively, are stretched, hyposanguinated, hypoxic and physiologically inefficient, and operate upon the lever of the vertebral column with a mechanical disadvantage.

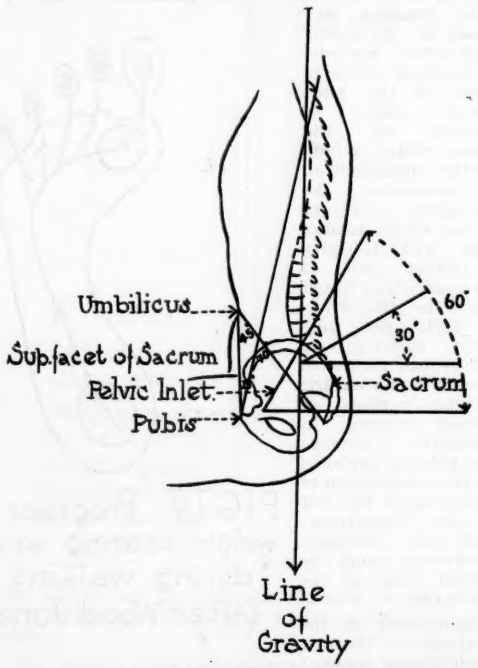


FIG VII Erect Posture

There are many other less obvious results of defective sitting posture which should be mentioned. The elimination of the lumbar curvature, the flaccidity of the anterior abdominal muscles, and the upward opening of the pelvic inlet all enable the intestines to press down on the bladder and genitals. The ribs are elevated posteriorly, thus depressed anteriorly, and the vital capacity is diminished.

This should not suggest sitting in the extreme chest-out position, for such a posture interferes with the mechanics of respiration, and accounts for the anoxic tremor of certain professional strong men.

The weight of the head, shoulders and upper vertebral column presses on the viscera. The diaphragm is flaccid, and the thoracic organs press down on the stomach and liver. Owing to the flaccidity of the abdominal muscles, there is a reduction of the intraabdominal pressure which

aids the venous return from the abdominal veins. The kidneys and liver are unsupported by the lumbar curvature and tone of the abdominal muscles, and there may be a stretching or rupture of their fascial investments, producing "floating" kidneys or liver. The state of hypoxia which results from inhibited respiratory movements adversely affects not only voluntary muscles, but also the smooth muscle of the circulatory and digestive systems. This hypoxia has a direct depressive effect on the cerebral cortex, and an indirect effect by retarding the kidney function of secreting such depressive substances as phenols. The hypoxia, of course, is accompanied by mild acidosis, because the tense and fatigued back muscles are producing increased amounts of carbon dioxide and lactic acid, which are inadequately expired or buffered. Often poor posture involves the position of a book closer to the eyes than is desirable, causing overstrain of the muscles of positive convergence and accommodation, and stretching and permanent weakening of their antagonists; myopia

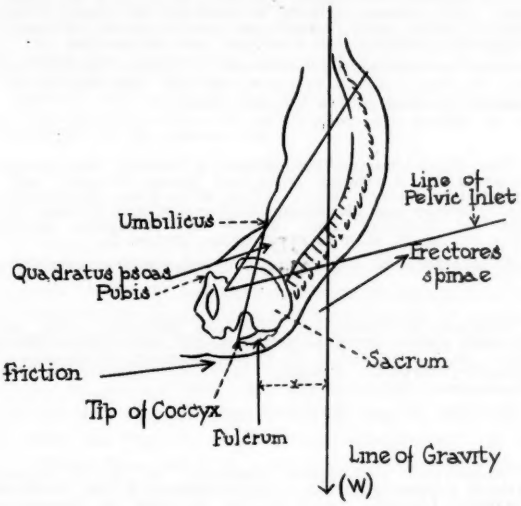


FIG VIII Slumped posture (Semi)

expresses the result bluntly. In long-standing cases of slumped sitting, especially among subjects in wheel chairs for long periods, gross changes occur in the anatomy of the vertebral column. On the concave (anterior) side the bone becomes densely trabeculated, the cartilage thin and fibrous or eburnated, the muscles and elastic fibres shorter, thicker and fibrotic. On the convex (posterior) side, the bone is rarefied, the cartilage is atrophic, the muscles are overstretched and paralysed.

The choice of a correct seat is an all-important aid to correct sitting posture. The chair should enable the muscles to be relaxed while the upright position is maintained, the pelvis vertical, the lumbar curve preserved, the shoulder hanging back and down, and the chest and abdomen expanded. Usually, if one condition is present so are the others, and *vice versa*. There should be facilitation for the backward rather than the forward sliding of the ischia. The feet should be able to rest flat on the ground. Pressure should be absent just distal to the gluteal fold and in the popliteal region, where the vessels and nerves are comparatively superficial. The back support should not extend below the hips, or else the glutei come in contact with it and interfere with its moulding into the lumbar curve. Ideally there are but two posterior support bars, at the levels of the eighth and tenth thoracic vertebræ and the third and fourth lumbar vertebræ (Bennett). The desk should be so low that the shoulders are not raised, and there is no thoracic cramping. When writing, one should bend from the hips and not from the waist.

Conclusion.

In an investigation carried out by the National Health and Medical Research Council, of 421 children examined 66·5% had postural deficiencies and 46·3% needed expert attention. "The Health of the School Child", by the chief medical officer of the Ministry of Education, England, contains the following statement by the orthopædic surgeon:

> The war has revealed how large a number of young men and women entering the Services suffer from postural defects of one sort or another. These defects are the source not only of trouble under service conditions, but also in civilian life give rise to considerable disability and ill health. Patients suffering from painful conditions of the back and feet form a considerable portion of the attendance at the orthopædic department of any hospital, and in the great majority of cases these disabilities can be attributed to a fault in posture and muscle development—correctable in childhood, incorrectable only too often by the time the adult patient complains of pain and disability.

Yet the vast majority of people continue to sport postural defects unabashed and undismayed. They suffer from the anatomical and physiological defects I have mentioned previously. Their vitality is poor, their appearance worse. Among the pathological, near-pathological, and disabling conditions to which they are tending may be mentioned flat feet (though the Red Indian with functional pedal perfection is notorious for "fallen arches"), *genu valgum*, *genu varum*, scoliosis, kyphosis, lordosis, kypho-lordosis, winged scapulæ, and osteoarthritis.

A recent study of posture is concerned not with its physical features, but with its relation to psychology. "Will-temperament tests", in which posture characteristics are recorded against character traits, indicate that persons with good posture have self-respect and self-reliance in excess of those of their slouching fellows. This is merely a scientific study of the age-old popular process of assessing the character of a people from its physical bearing.

When will men take notice and sit up? There is more truth in the principle, if not the practice, of yoga than most westerners believe. Good posture will ensure that at least we are more comfortable in the present and less pathological in the future.

Acknowledgements.

To Dr. E. S. Meyers, Dean of the Faculty of Medicine at the University of Queensland, for his encouragement, and to Miss L. Pegus, University of Queensland Medical School artist, for the execution of the illustrations, I owe my thanks.

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Reviews.

Roentgen, Radium and Radioisotope Therapy. By A. J. Delario, M.D.; 1953. Philadelphia: Lea and Febiger. Sydney: Angus and Robertson, Limited. 9½" × 6", pp. 372, with 65 illustrations. Price: £4 0s. 9d.

THIS is a book of facts and figures which traverses rapidly and completely the whole ground of radiation therapy, including radium therapy and the more modern matters pertaining to isotopes. This is all compressed into a matter of some 300 pages, and the set-up is necessarily pre-eminently synoptic and condensed. Indeed, the author tells us frankly that the book arose from his domestic notes computed from his reading to provide him with a comprehensive source of ready reference. Books of this type are useful, but can scarcely arouse interest or enthusiasm, as the note-book style becomes wearisome and leads one to use the book as a reference, rather than as a text-book. "Scissors and paste" peep out from every page, and the author almost never assumes the authority of a personal opinion.

In short, the book is frankly a compilation, and its merits lie within this definition. It is a complete précis of the subject matter with a distinct emphasis on the table, the figure and the graph to several places of decimals. It is a necklace, of which each bead is a fact, and the writer threads them on a string of his own manufacture in systematic order. It is decidedly not a work for the beginner and equally not a book for the advanced physicist, as it covers too much ground in too short a space. For the practising radiotherapist, however, it is an excellent compilation of relevant theory and principle laid out in a readily accessible fashion.

This was the professed objective of the author, and he may be congratulated on its successful attainment.

Clinical Unipolar Electrocardiography. By Bernard S. Lipman, A.B., M.D., and Edward Massie, A.B., M.D., F.A.C.P.; Second Edition; 1953. Chicago: The Year Book Publishers, Incorporated. 8" × 5½", pp. 310, with 260 illustrations. Price: $6.50.

WHEN the first edition of this book appeared, it was suggested that it would become a standard text for students and practitioners. Now a second, slightly larger edition has been published, and this claim has been augmented by a broadening of the scope of the book to include the cardiac arrhythmias.

Although the authors make no claim to full treatment of the ectopic rhythms, this section is clearly presented in unambiguous terms and again with excellent illustrations.

Apart from this section the work remains substantially the same, with minor additions. These include a description of that valuable procedure the Master exercise test. It is a pity that a table of the number of trips based on age, sex and weight was not included, as it would add to the practical value.

The hyperventilation syndrome is mentioned as a possible cause of *T* wave inversion, and the administration of ergotamine is suggested as a means of reversing this inversion; but the mode of administration is not mentioned. The intravenous route is unwise for several practical reasons, not the least of which is its emetic effect.

As this work has a didactic rather than a discussional approach, all controversial issues are omitted. Recent work calling the rotational changes of the heart into question is not mentioned, nor is vectorcardiography. However, it is to the authors' credit that they maintain this slight conservatism, as neither vectorcardiography nor the newer three lead chest cardiography is at all proven as having supplanted unipolar electrocardiography.

On page 163 it is stated that "ventricular premature contractions are diagnostically important", but no reason is given. Such cases may have a sinister prognosis, with ventricular fibrillation as the final arrhythmia.

One is pleased to see stress laid on the use of carotid sinus pressure when cardiograms of patients with tachycardia are being taken, as a means of differentiating sinus tachycardia from supraventricular tachycardia, or the latter when associated with bundle branch block from the much more serious ventricular tachycardia.

One minor criticism refers to the use of six illustrations to demonstrate different rates of sinus rhythm.

As was pointed out earlier, this work has consistently good illustrations and clarity of expression, which make it an ideal aid for those interested in the subject of unipolar electrocardiography.

Books Received.

[The mention of a book in this column does not imply that no review will appear in a subsequent issue.]

"Eden and Holland's Manual of Obstetrics", by Alan Brews, M.D., M.S. (London), M.R.C.P. (London), F.R.C.S. (England), F.R.C.O.G.; Tenth Edition; 1953. London: J. and A. Churchill, Limited. 9" × 6", pp. 824, with 57 plates, 12 in colour, and 378 text figures. Price: 52s. 6d.

A complete revision of a standard text-book.

"Progress in Neurology and Psychiatry: An Annual Review", edited by E. A. Spiegel, M.D.; 1953. Volume VIII. New York: Grune and Stratton. 9" × 6½", pp. 604. Price: $10.00.

Over 3200 papers are reviewed in this volume.

"An Approach to General Practice", by R. J. F. H. Pinsent, M.A., M.D. (Cantab.), with a foreword by Lionel Whitby, C.V.O., M.C.; 1953. Edinburgh and London: E. and S. Livingstone, Limited. 9" × 6½", pp. 174. Price: 12s.

Aims "to give to the newcomer to general practice some idea of what may be in store for him, and what may be expected of him in his life and work".

"The Guide Through 'Teen Years: A Reliable Book Specially Prepared for Australian Girls and Young Women", with a foreword by Harvey Sutton, O.B.E., M.D., B.Sc.; First Edition; 1953. Sydney and Melbourne: Father and Son Welfare Movement of Australia (Inc. Mother and Daughter Section). 7½" × 5", pp. 32, with 13 illustrations. Price: 2s.

Straightforward information on sex for 'teen-age girls.

"Synopsis of Pediatrics", by John Zahorsky, A.B., M.D., F.A.A.P., assisted by T. S. Zahorsky, B.S., M.D.; Sixth Edition; 1953. St. Louis: The C. V. Mosby Company. Melbourne: W. Ramsay (Surgical), Limited. 8" × 5", pp. 470, with 158 illustrations. Price: £3 18s. 9d.

The last edition was issued in 1948.

"Elementary Pathological Histology", by W. G. Barnard, F.R.C.P.; Third Edition; 1953. London: H. K. Lewis and Company, Limited. 10" × 7½", pp. 88, with 185 illustrations, eight in colour. Price: 17s. 6d.

Designed to help the student during his course in elementary general pathology.

"Rawling's Landmarks and Surface Markings of the Human Body", revised by J. O. Robinson, F.R.C.S.; Ninth Edition; 1953. London: H. K. Lewis and Company, Limited. 8½" × 5½", pp. 110, with 38 illustrations. Price: 12s. 6d.

A standard work recently revised.

"The Faber Medical Dictionary", edited by Sir Cecil Wakeley, Bt., K.B.E., C.B., LL.D., M.Ch., D.Sc., F.R.S.E., F.R.A.C.S., F.A.C.S., F.R.S.A., F.Z.S.; 1953. London: Faber and Faber, Limited. 11" × 7½", pp. 478. Price: 45s.

An English medical dictionary.

"The Surgical Clinics of North America"; 1953. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. Ochsner Clinic, Wayne University, Number. 9" × 6", pp. 292, with 66 illustrations. Price: £7 5s. per year in cloth binding and £6 per year in paper binding.

Contains 10 articles in a symposium on vascular surgery and 15 articles in a symposium on the surgery of trauma.

"The British Contribution to Medicine", by Jaime Jaramillo-Arango, with a foreword by Arthur Macnalty, K.C.B., M.D., F.R.C.P.; 1953. Edinburgh and London: E. and S. Livingstone, Limited. 9" × 6½", pp. 232, with 45 plates. Price: 25s.

The author, a medical man, spent some years first as Minister and then as Ambassador of the Republic of Colombia in Great Britain. This book is intended to be "a permanent memorial of his mission".

The Medical Journal of Australia

SATURDAY, FEBRUARY 6, 1954.

All articles submitted for publication in this journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words or phrases.

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AN INAUGURAL ADDRESS ON EDUCATION.

In most of the references to medical education in these columns during the last twelve months, stress has been laid on the need for students entering on the study of medicine to have a broad educational background. This view was expressed several times during the recent World Conference on Medical Education held at London. We know that the field of knowledge is so vast that no single mind of today can hope to cover it, even superficially. It was not always thus, and even a century ago many men might claim to have had acquaintance with most of the branches of what we know today as culture. We know that all men are by no means equally endowed. Some persons have the faculty of being able to make an intensive and detailed study of the intricacies of a subject and even to add something new to it. Others have, perhaps, the facility to take a broader outlook and to cover a larger ground, though not in such detail. People of this kind may have what are known as first-class minds or their minds may fall into a lower grade. The profession of medicine, like every other profession, has people with minds of varying kinds among its adherents. But whether students have first, second or third grade minds, they all have to undergo a period of medical education in university and hospital. Once they have determined which of the many avenues of medicine they intend to follow after graduation, their course depends on their willingness to remain students and to try to discover something new during their journey. Every medical graduate needs an occasional stimulus lest he become weary in well doing, and it is for this reason that attention is drawn to a recent inaugural address given at Westminster Medical School in October, 1953, by Lord Radcliffe, a Lord of Appeal in Ordinary.[1] Unfortunately, *The Lancet* publishes only part of the address; the full text appears in the school magazine, *Broadway*; this is not available to us.

[1] *Lancet*, December 26, 1953.

Lord Radcliffe referred to what he called the "universal men". They were men of universal knowledge who could cover every branch and keep it under the eye. Lord Radcliffe, stating that "we should all be better men and fuller men if we had behind us a wider range of education", offered one or two suggestions which he thought might be of assistance to the young men and women to whom he was talking. He told them that they must keep their curiosity alive. Curiosity was, he said, one of the great influences of civilization. It would come to pass, as the student became a master of his craft, that the certainties would recede, enthusiasms would to some extent fade; however, if curiosity and an inquiring mind were kept alive, this would be a sustaining force till the end. Here it is perhaps as well to give a warning that the possessor of an inquiring mind is not the same as what is known colloquially as a "sticky beak". A sticky beak pokes his nose into places where it has no right or business to enter. He may say, and sometimes does say, that that is how he learns about things and persons. He cannot see a book or a paper or an instrument lying in another man's consulting room or study without picking it up and examining it, regardless of whether it is intended to be kept for the person to whom it belongs. People like this will not be told of their faults; they are too overbearing and pose as strong men. But this is really a digression. The man with an inquiring mind wishes to find out the why and wherefore of things and also to discover where the facts that he already knows will lead him if he follows them. The man with the inquiring mind will never be at a loss to find something that will hold his interest. Even as the years pass and old age overtakes him, he will still be able to find fresh fields of intellectual or other adventure. Lord Radcliffe went on to advise his listeners to back their fancies. He said: "Let your curiosity take you into the paths which fascinate you or appeal to you, and do not let it be dominated by what other people around you or in the past have said are the great, or the important, or the beautiful things." The account in *The Lancet* may not give the whole context of this statement. We must conclude that this statement takes it for granted that the "fancy" is an educated fancy, one which has become selective because of an inherent sense of values and a fixity of purpose. Another piece of advice which Lord Radcliffe might have given was "do not allow yourself to live in a groove". Men of medical and other science, perhaps more than any other group, tend to become one-sided. At the same time, possibly all of us could point to men of the highest intellectual attainment in other walks of life who can see, think and talk about nothing else but their own subjects. If the work of another profession is brought to their notice, they will probably change the subject or remain silent. It would be much better for them if they tried to learn how members of other callings try to look at the problems which they themselves have to face. It would be hard to imagine anything more sterile than a conversation between a medical graduate, a lawyer and a theologian, each of whom was so bound up in his own sphere that he did not bother to try to look at things through the eyes of any other profession. A medical graduate who lives in a groove, in a rut, may be compared to a donkey with a carrot in front

of his nose and wearing blinkers. Lord Radcliffe said that in some countries without a long history on record, it might not mean much to say, "Keep your curiosity alive", because it might not lead very far. He thought that in Great Britain with its past history and the great civilization to which Britons belonged and had belonged, it would be impossible not to be reminded of them. Australia is developing its medical history and it is an offshoot of the medical history of Great Britain. Young country and all as it is, many of its hospitals can boast of men who in their day were "pathfinders in medicine"—men who have lit a torch which is still burning, and have set an example which may still be followed. The same may be said of Australian universities.

Lord Radcliffe entitled his address "Education for Elizabethans". He had something to say about the first Elizabethan era. He referred to what Shakespeare put into the mouth of Hamlet: "What piece of work is a man! How noble in reason! How infinite in faculties! . . . in action how like an angel! in apprehension how like a god! the beauty of the world! the paragon of animals." At the same time, he pointed out that Shakespeare made Hamlet place man, with all his potentialities, against a dark background: "This brave o'erhanging firmament, this majestical roof fretted with golden fire, why, it appeareth nothing to me but a foul and pestilent congregation of vapours." He said that it was the dilemma of men today when they saw the inmost secrets of Nature and the great resources that lay still untapped in the firmament conscripted to form the major instruments of man's destruction. It was also felt to be the dilemma of the first Elizabethans. He described them as greedy, avaricious, ambitious, as having a mania for power. At the same time, they were men who had a taste for magnificence and a taste for greatness, and a feeling for what they understood by honour. What mattered to them was the glory of the attempt and the achievement, and not the ultimate or recognition. This was reflected, he said, in Shakespeare's plays. He pointed out that the great man—Brutus, Antony, Hamlet, Othello, Lear, Coriolanus—went down to ruin, and went down to ruin with those he loved involved in his destruction, not because of any challenge that he, in his pride, had made to fate, and not because of any vice which was being punished or avenged by the moral law in his person, but because he was in the hands of a fate that was hostile to him and a darkness that he could not overcome. Lord Radcliffe drew attention to what most of us have felt, that Shakespeare's tragedies are not a cynical or a desperate presentation of man's dilemma, "because you do not feel while you watch these plays, nor do you come away at the close feeling, that darkness in the end is triumphant". These plays throw one back on the feeling that it is not success or failure which is the thing for which man is set here in his environment, but that what matters is his total gesture. This is the message which Lord Radcliffe would give to the present Elizabethans. Let us then keep our curiosity alive, but let it be a planned, worthy, and broadminded curiosity, not one that may be attributed to those who are tossed about by every wind of doctrine. The more we dwell on what is outside ourselves, the more likely are we to value "the glory of the attempt and the achievement" rather than the ultimate reward or recognition.

Current Comment.

BERYLLIOSIS.

BERYLLIOSIS is a modern disease that has claimed a good deal of attention in the field of industrial medicine, mainly in the past twelve years. During that period J. M. DeNardi, H. S. van Ordstrand, G. H. Curtis and John Zielinski[1] have observed and treated 468 patients suffering from various types of beryllium intoxication, so that their report on their observations forms a valuable contribution to the literature on the subject. They state that up to the present the largest number of cases of acute beryllium intoxication have occurred in plants engaged in the extraction and processing of beryllium, and that the largest number of cases of chronic berylliosis have been reported in connexion with the manufacture of fluorescent lamps. The least number of cases of both types have been in workers engaged in the salvage of fluorescent lamps in sign-tube manufacture, in laboratory research, in the manufacture of ceramics containing beryllium, in the manufacture of beryllium alloys and in the working of beryllium metal. No cases of beryllium intoxication have been reported amongst those engaged in the mining, shipping or handling of beryl ore.

Reference to the dangers of beryllium poisoning was made in these columns on May 20, 1950, as well as in a Special Article by Gordon C. Smith published in this journal on August 20, 1949, and it was felt at the time that there was some urgency about the need to acquaint all those concerned with the situation. It is reassuring to have the statement of DeNardi and his colleagues that remarkable results have been accomplished in the control of this industrial problem by the cooperation of the various interested scientists during the relatively brief period that has been devoted to study of the problem. In their paper, DeNardi *et alii* describe the metal and its compounds and the methods of extracting it from its ores. They also refer to the procedures adopted to prevent the contact of workers with beryllium. They offer descriptions of three types of berylliosis of the skin, of acute tracheo-bronchitis due to beryllium and of acute and chronic pulmonary berylliosis. They state that in recent years the incidence of cutaneous berylliosis among workers in the beryllium industry has been reduced from 25% to 2% and that of the respiratory syndromes almost to zero by engineering and medical hygienic preventive measures. The eczematous type of dermatitis they regard as being caused by allergic sensitivity to beryllium compounds. They report on studies carried out by Curtis from beryllium patch tests on patients with both acute and chronic berylliosis, on control subjects and on patients with similar pathological conditions. The studies suggest that the entity is one of hypersensitization and that the patch test is an extremely important tool in differential diagnosis. The report contains clinical and laboratory data obtained from more than 75 patients who recovered from tracheo-bronchitis and pneumonitis, with a detailed tabulation of the results in 20 cases of each group. Details are also given of 37 cases of chronic dermal and pulmonary forms of beryllium intoxication, with eight resultant deaths, from the experiences of DeNardi and his colleagues between 1944 and 1953. Significant data also are presented of beryllium findings in the post-mortem tissue of two patients who had recovered from major acute respiratory manifestations, but who died later from other causes years after removal from exposure. DeNardi *et alii* state that the presence of beryllium in body tissue and in urine is indicative of past or recent exposure to beryllium. The amount detected by present analytical methods bears no relationship to the diagnosis of berylliosis *per se*, or to the severity of the disease if present. Beryllium remains in body tissues and is excreted for a period of many years after the patient has been removed from exposure without evidence of beryllium poisoning. There is some evidence in this survey of proportional decrease of excretion of beryllium with an increase of

[1] *Arch. Indust. Hyg.*, July, 1953.

time from the last exposure. It is stated that acute pulmonary berylliosis has been the severest manifestation of acute beryllium poisoning which has been observed and treated. There were 93 instances of this, which resulted from exposure in local extraction and processing plants, and ten deaths occurred. No persons included in the survey of patients recovering from acute pneumonitis developed the chronic or delayed form of berylliosis. Of the eight instances of chronic berylliosis of occupational origin, one patient had a medically established diagnosis of acute tracheo-bronchitis, while four others gave histories suggestive of acute tracheo-bronchitis during brief occupational exposure to beryllium. From the management point of view, the emphasis is today on prevention rather than treatment. DeNardi and his colleagues state that the integrated medical, safety and industrial hygiene programme has been largely responsible for the phenomenal decrease in instance of beryllium poisoning and in the total elimination of deaths in the local extraction plants. Once the condition has developed, therapy is mainly symptomatic and conservative, with recent encouraging results from the use of ACTH and cortisone in the treatment of both the chronic and the acute manifestations.

AUREOMYCIN AND THE PREVENTION OF RHEUMATIC FEVER.

EARLY last year, a special statement on the prevention of rheumatic fever was prepared by a special committee and issued by the American Heart Association. Reference was made to it in these columns on March 28, 1953. In the statement it was pointed out that the prevention of rheumatic fever and rheumatic heart disease (with all that that implies) depends upon the control of streptococcal infections, and that this might be successfully accomplished, firstly, by early and adequate treatment of streptococcal infections in all individuals and, secondly, by prevention of streptococcal infections in rheumatic subjects. For the control of streptococcal infections, penicillin was recommended, and details of dosage were given. Penicillin lozenges, penicillin followed by sulphonamides and sulphonamides by themselves were not recommended. Brief mention was made of aureomycin as being less effective than penicillin but useful for patients sensitive to penicillin. For the prevention of streptococcal infections the two drugs recommended were sulphadiazine and penicillin. No particular mention was made of aureomycin. The role of this particular antibiotic has been examined in detail more recently by L. V. McVay, junior, and Douglas H. Sprunt,[1] who report its use as a prophylactic agent in 35 rheumatic patients. Discussing the prevention of rheumatic fever, they acknowledge the value of prompt diagnosis and adequate treatment of streptococcal infection, but point out that the actual prevention of such infections in rheumatic subjects provides the best prospect of effectively controlling the rheumatic state. Such persons are relatively susceptible to streptococcal infections, and recurrence may be anticipated in 50% to 70% of cases of rheumatic fever. Moreover, possibly 40% of streptococcal infections are so mild that medical attention and treatment are not sought. Nevertheless, rheumatic fever may result from such minimal involvement. Of prophylactic agents, sulphadiazine is limited in its prolonged and widespread use by the development of resistant strains of organisms and by various toxic effects, some of which are serious and even fatal; its main advantage is its low cost. Penicillin, administered orally, appears promising, and is not excessively expensive, but studies in its use are still in preliminary stages, strains of streptococci resistant to it have been reported, and toxic effects are occasionally recorded. In the present study, 23 rheumatic patients received 500 milligrammes of aureomycin daily for an average of nine months with only one recurrence. The duration of therapy ranged from two to twenty months, six patients being observed for a year or more. In a control series of 12 persons followed for an average of eleven months, four recurrences developed. In an additional case in the control series, four severe respiratory infections developed during a period of eight months, and the patient was therefore transferred to the aureomycin series and developed no more respiratory infections in the ensuing eleven and a half months. A reduction in respiratory infections of approximately 50% was observed in patients receiving aureomycin; and, in addition, subjective and objective evidence indicated definite improvement in health in the aureomycin-treated, as compared with the control patients. One death occurred in each group of patients; the patient in the control group was found *post mortem* to have active rheumatic heart disease; the death in the aureomycin-treated group was unrelated to rheumatic fever. Therapeutic side effects were minimal. In only one case was it decided to discontinue administration of aureomycin, and even then the development of significant toxicity was doubtful. Gastro-intestinal symptoms were minimal, and laboratory procedures failed to demonstrate any overgrowth of either *Candida albicans* or hæmolytic *Staphylococcus aureus* as a result of prolonged aureomycin treatment. Extensive sensitivity studies involving approximately 450 persons failed to demonstrate the development of significant resistance by group A β-hæmolytic streptococci as a result of the prolonged administration of 500 milligrammes of aureomycin daily. As McVay and Sprunt point out, it appears from these studies that aureomycin is a promising prophylactic agent for rheumatic fever. The expense of this antibiotic constitutes its greatest disadvantage, but with improvements in production methods, this problem should be minimized. Certainly, a great sense of security is provided by realization of the fact that an effective agent is available for those who are unable to tolerate either sulphonamides or penicillin. It is not suggested in this paper that the optimal dosage and method of administration of aureomycin for rheumatic prophylaxis has been established. For this, additional investigation is essential.

[1] *New England J. Med.*, September 3, 1953.

PALTAUF AND MARESCH.

THE *Wiener klinische Wochenschrift* of September 4, 1953, is a *Festnummer* dedicated to the memory of Richard Paltauf and Rudolf Maresch. Paltauf was born in 1858 and studied medicine in Graz, where he showed such ability that he was chosen by the professor of pathological anatomy as assistant. Various researches and military experiences followed, and finally he was appointed professor of general and experimental pathology in Vienna in 1900, as well as director of the great institute for experimental pathology and serotherapy which was built from his design. Rudolf Maresch was born in 1868, graduated in medicine at Prague and became a pupil of Paltauf's in Vienna, publishing many interesting articles embodying original research with a strong leaning towards pathological morphology. The two men, Paltauf and Maresch, displayed differences in temperament and outlook, but they possessed a number of excellent qualities in common; both were painstaking and accurate in their experimental and descriptive work, both were inspiring teachers and leaders, and both permitted, if indeed they did not actually encourage, freedom of selection with consequent wide diversity of aim in original research while yet remaining capable of sympathy and guidance.

This special number, in addition to biographical and appreciative notices of Paltauf and Maresch, written by pupils of distinction, contains 44 contributions coming from a wide domain of medical achievement, but with special emphasis on pathological morphology. As might be expected, most of the writers are Viennese or have been associated with Vienna, but there are contributions from the United States, Buenos Aires, England and Germany, all from investigators who have been inspired by these two Viennese pathologists.

It would invite the charge of being invidious if any selection was made of the 44 articles presented, but the following may be given as examples of the general standard attained. G. Politzer examines the asymmetry of the liver and points out that in the early stages of development this organ is symmetrical or nearly so; then as a result of the need for accommodating stomach and adjacent structures, the left lobe takes a back place in size, actually undergoing some degeneration. However, in hepatomphalos the aberrant liver is symmetrical. The second contribution chosen deals with the lesions produced by powerful electric currents. It has hitherto been assumed that burns produced by accidental electrification are simply burns and should be treated as such, but Dr. Stefan Jellinek, who, by the way, writes from Oxford, points out that though this may be true in a few cases of contact with arcs or heated conductors, there is something additional in lesions produced by electric currents of high amperage and voltage passing through living tissue; there is, in fact, a polarity, elastic fibres contract and blood vessels constrict at the positive pole, whereas the opposite occurs at the negative pole. Foci of ischæmia may also be found in various organs. Fortunately such lesions generally heal well without inflammatory reaction.

It is a pleasure to see the *Wiener klinische Wochenschrift* returning to its old form and standards. When as a result of post-war depression and political shuffling of territory the medical school of Vienna sank in vigour and opportunity, the journal became a shadow of its former self. Now it is back to its old tradition, and this is a matter for congratulation throughout the whole medical world. The editors announce that not all the contributions to the *Festnummer* could be included; others will appear in later issues, and we can look forward with pleasure to this event.

CORTISONE, ACTH AND IDIOPATHIC STEATORRHŒA.

IDIOPATHIC STEATORRHŒA is a particularly intractable condition. Cortisone and ACTH appear to offer the best form of therapy so far produced that can in any way be described as specific and likely to be effective. A number of reports have appeared in America over the past two or three years, and a recent report from England is in line with those findings. This latest report comes from Birmingham, where W. T. Cooke[1] has treated a small series of six patients suffering from idiopathic steatorrhœa, diagnosed according to accepted criteria. The condition was well established, as in all but one case the patients had been attending the clinic for three to six years. Treatment was administered in hospital, and was accompanied by a continuous careful biochemical check. After a control period, ACTH was administered daily, intramuscularly in one case, partly intramuscularly and partly intravenously in a second, and intravenously alone in the other four cases. In all cases, considerable subjective improvement was noted during the administration of the ACTH. Energy, appetite and morale were notably improved, and in two cases in particular, this contrasted strikingly with an apathetic attitude before therapy. In one case, the effect had worn off ten days after cessation of therapy. In four cases subjective improvement appeared to be maintained for some months, but in two of these cases the patients were essentially unchanged a month after therapy. It was, however, difficult to assess this feature adequately. Improvement in intestinal function of varying degree was demonstrated, but in most cases this did not persist on cessation of treatment. Some effect on fat excretion was noted in all six cases; in most cases a reduction occurred during the treatment period, but in two cases the reduction was greatest after the cessation of treatment. The water content of the fæces was clearly reduced during the administration of ACTH in the four cases for which data are available. There was an initial sodium retention at the start of therapy, decreasing in degree with continuation of therapy, and a well-marked sodium diuresis on cessation of therapy. In all cases a positive potassium balance was maintained throughout treatment; at the beginning of therapy this was not substantial, but on cessation there was a considerable increase in the amount retained. A positive nitrogen balance was attained in all cases except one. Cooke comments that neither the findings in the present series nor those in the published reports provide definite evidence about how ACTH produces its effects, beyond suggesting that beneficial effects are exerted on both intestinal and systemic functions. The general experience has been that the symptomatic effects are continued during the period of treatment, but only for a relatively short time afterwards. Opinion is still not settled on just how long treatment with ACTH and cortisone may be continued, or just how often it may be repeated, and to this extent its role in the treatment of idiopathic steatorrhœa remains undefined. Nevertheless, as Cooke comments, results with corticoid therapy, compared with general experience in the treatment of the disease, are sufficiently encouraging to warrant further careful study of its use in the treatment of idiopathic steatorrhœa, and of the evidence it may provide concerning intestinal absorption and the factors affecting it.

[1] *Lancet*, August 29, 1953.

MARRIAGE AND MENTAL DISEASE.

IT is commonly held that the incidence of mental disease is higher in the single than in the married members of the community. This would appear to be against the acceptance of Mr. Punch's advice, "Don't", to those about to be married. A psychiatrist who has been interested in this subject is Ørnulv Ødegard. He wrote on the subject of marriage and mental disease in *The Journal of Mental Science* in 1946 and he has now, in the same journal for October, 1953, written an article entitled "New Data on Marriage and Mental Disease: The Incidence of Psychoses in the Widowed and the Divorced". In his previous paper he discussed two possible explanations of the commonly held belief already stated. The first was that there is a selection by marriage whereby individuals who are personally and socially handicapped tend to remain single. The second was that there is a protection by marriage which guards the married against the outbreak of mental disease to which the same individual would have succumbed had he remained single. Ødegard has now investigated the subject and has dealt with widowed and divorced persons, since he thought that they might offer a clue to the solution of the problem, because in such groups of persons, the hypothetical protection had ceased to exist, while the factor of selection remained. He writes that the experiment is not so clear cut as it might appear to be. The widowed do not merely lose the social and personal protection of married life, but in many respects have to adjust themselves to more serious problems than they would have encountered if they had never been married at all. Of course, some widows or widowers continue to enjoy at least some of the privileges of married life such as home and children. He has dealt with a total of 23,115 first admissions to mental hospitals in Norway between the years 1931 to 1945. This total included 1441 widowed and 515 divorced patients. Among the widowed persons, the clearest evidence of ætiological connexion between the outbreak of psychosis and the cessation of married life was found in a group of 35 widows admitted to hospital for depressive psychoses. In eight of these cases, it seemed fairly certain that the death of the husband was a direct cause of the depressive reaction. These patients were women in the late forties or the fifties, most often with grown-up children. The group of schizophrenic and paranoid patients contained eleven widowers and fifteen widows, but in no case was the death of the spouse thought to be an ætiological factor of primary importance. Alcoholic psychosis was observed in two widowers only. Both were chronic alcoholics, but the death of the wife led to increasingly heavy drinking. The divorced persons pre-

sented an entirely different picture. Amongst the 71 divorced patients not a single case could be found in which it could be established as probable that the outbreak of the psychosis was caused by the divorce or by the marital incompatibility leading up to the divorce. In seven of the cases, there was a possible cause or connexion, but in none of them was the evidence very convincing. On the other hand, it was found that in 46 of 71 cases, the divorce was probably caused by the psychosis—either by mental symptoms or by "symptomatic alcoholism". This was particularly true of the schizophrenics, who were mostly of the paranoid type. In all fifteen male schizophrenics, and in fifteen of the 20 female schizophrenics, the divorce was probably caused by the psychotic symptoms, or by heavy drinking which developed in connexion with the psychosis. In only one of the thirty cases was the condition recognized as a mental anomaly at the time of the divorce proceedings. In the remaining cases, the diagnosis was not made until later on, mostly within one or two years. Cases in which the divorce was granted on the grounds of insanity are therefore not included in the material investigated. The statistical and clinical experience of the author led him to the conclusion that the main factor in the interplay of marriage and mental health is what he calls selection by marriage. No protective influence of married life could be shown to exist. The author states that the problem of selection *versus* protection is thought to be a useful formulation of the more general problem of constitution *versus* environment or of nature *versus* nurture. He adds that a statistical investigation based upon the incidence of psychosis is naturally too crude in its method and too restricted in its scope to warrant anything but the most tentative conclusions.

THE CAROTID SINUS SYNDROME IN ASSOCIATION WITH AURICULAR FIBRILLATION.

THE carotid sinus syndrome does not appear to have been reported in persons also suffering from chronic auricular fibrillation. It is a well-defined condition, which was perhaps best described by Weiss and Baker twenty years ago, but Louis Soloff and Jacob Zatuchni in a recent article state that they are not familiar with any discussion of the possibility of coexistence of the two conditions.[1] However, they can see no reason why cardio-inhibitory phenomena should not occur in individuals with auricular fibrillation, and describe the existence of a hyperactive carotid sinus reflex in seven out of 20 consecutive patients with chronic cardiac disease and associated auricular fibrillation. These patients were questioned so as to reveal any history of episodes of syncope. They were male and female in equal numbers, and their ages ranged from forty to eighty-four years. In every instance the heart was enlarged owing to chronic rheumatic disease or arteriosclerotic vascular disease affecting the coronary vessels, and in some patients the peripheral arteries also. All patients were receiving digitalis. With the patient in a recumbent position an electrocardiogram was taken, with a machine allowing direct inspection of the tracings which were taken before, during and after compression and massage of the carotid sinus by pressure against the cervical vertebræ, first on the left and then on the right side. Care was taken not to overdo these tests, as the patients were of a class which might be expected to show some sensitivity to disturbance of the cardiac rhythm. Only two of the patients gave a definite history of syncope, but seven patients showed clinical and electrocardiographic evidence of a hypersensitive carotid sinus. The authors give detailed histories of the relevant cases and discuss their findings. They recognize the three types of symptoms described by Weiss and Baker as occurring from the stimulation of an unduly active carotid sinus reflex and thus affecting the cardiac rate, the blood pressure or the cerebral function. Thus an abrupt decrease in the heart rate may occur, or even a cardiac standstill, from which nodal escape may periodically occur. In other persons an equally sharp fall in blood pressure may occur, perhaps sufficient to cause syncope; and in a third type cerebral symptoms may occur alone. Attention has been drawn to these symptomatic groups by other writers, who have also observed disturbances of respiration or of gastro-intestinal motor function. In certain sensitive persons the syndrome may at times be provoked by simple causes, such as pressure or movement of the head or body. The authors draw attention to the possible potentiation of the reflex by digitalis. They wonder why sensitivity of this reflex has not been more often considered in patients with coronary or systemic vascular sclerosis, with or without hypertension. Their observations lead them to believe that the reflex acts upon the auriculo-ventricular node, and they give some detailed evidence. The practical aspect of the condition lies in the relatively benign nature of this type of syncope, even if the trigger mechanism is in the myocardium itself. Soloff and Zatuchni point out that although attacks of this kind may alarm the patient, they carry a less serious prognosis that other syncopal attacks in patients with declared cardio-vascular disease. Treatment may be successful in preventing recurrence of attacks, the two aims being to increase the efficiency of the heart itself and to block the reflex at some point in its anatomical course. Digitalis may enhance the reflex at times, but its virtues outweigh this, and the usual measures should be taken to discover and maintain the optimal dose. Vagal blocking drugs may also be tried, but the authors, not surprisingly, have not found them very effective, nor have they had success with quinidine. Caution would of course be desirable with this drug. It should be noted that the therapeutic suggestions are based on a small foundation of experience, but further observations would be of interest, even if, as we must often confess, it is easier to unravel the physiological basis of a syndrome than to prevent or reverse it.

[1] *Am. J. M. Sc.*, September, 1953.

THE COLLEGE OF GENERAL PRACTITIONERS: FIRST ANNUAL REPORT.

THE first annual report of the College of General Practitioners has been received. This document traces the foundation of the College and also gives an account of the attempts which were made to found a college of general practitioners over one hundred years ago. The paragraph which will be of most interest to readers of this journal has to do with the future of the College. Here it is stated that the future will lie in the hands of the College members. The year 1954 will, we are told, be a year of consolidation. Steps will be taken to build up the regional facilities. These will be modelled on one pattern; but their development must follow lines best suited to local conditions and local needs, and their rates of progress will vary. It will be largely through these regional faculties and the boards of these faculties that members will be able to help, and be helped by, the College. The work of education, research and other committees will increase in scope and reports will be published by them from time to time. There is now, and there always will be, much to be done in the academic field, both for general practice and for general practitioners. The Foundation Council is confident that this young college will play a major part in the future evolution of general practice and will uphold all that has been thought best in it since Hippocrates and his school on the island of Cos introduced the scientific spirit into their work over two thousand years ago. This, of course, will be the earnest wish of everyone associated with medicine in Australia. If this scientific spirit is combined in the College with the proverbial humanity of general practice, the ideal of Dr. George Webster, expressed 108 years ago, will be realized—"the welfare, respectability and usefulness" of general practitioners will be promoted. And well it may. Before the College was six months old 2000 practitioners had joined, 130 of them from overseas.

Abstracts from Medical Literature.

PATHOLOGY.

Pathogenesis of Coronary Sclerosis.

PAUL H. LOBER (*Arch. Path.*, May, 1953) has examined by dissection the coronary arteries of a series of 536 hearts from autopsies of persons of both sexes from birth to eighty-nine years of age, to determine the severity of atherosclerosis in each. The degree of the sclerosis in each is graded on the basis of microscopic examination of the most severely affected area. The degree of infiltration of the intima, relative area of lumen, relative thickness of intima, degree of elastic degeneration and outside diameter of the artery are graded or measured independently and the results tabulated. The degree of coronary sclerosis is found to increase progressively with age from early childhood through the seventh decade at a nearly uniform rate. Coronary sclerosis is found to be significantly more severe in males than in females of the same age group even in the first decade of life. The degree of coronary atherosclerosis is found to be much greater in hearts with evidence of hypertension than in non-hypertensive hearts from persons of the same age and sex. Diabetic persons show severer coronary sclerosis than others, although not enough cases of diabetes were encountered to supply significant data. Persons dead from malignant neoplastic disease are found to have significantly less severe coronary disease than those of the same age who have died without malignant disease. Death or serious symptoms from coronary sclerosis are found to be generally associated with an advanced degree of sclerosis of all three main coronary-artery branches. A comparison of various methods used to measure the degree of atherosclerosis shows no important differences in the results obtained with each.

Association of Certain Diseases with Specific Blood Groups or Rh Antigens.

CHARLES W. MAYO AND JAMES O. FERGESON (*Arch. Surg.*, April, 1953) have made a study of 935 cases of malignant neoplasm of the gastro-intestinal tract, 165 cases of duodenal ulcer, 117 cases of chronic cholecystitis with cholelithiasis, 87 cases of chronic ulcerative colitis, and 173 cases of fatal pulmonary embolism, in an effort to determine whether or not there is any relationship between the presence of a particular blood group or Rh antigen and the occurrence of these conditions. They state that in agreement with the conclusions of some investigators and in contrast to those of others, they do not believe that there is any significant relationship between the studied diseases and the grouping antigens.

Carcinoma of the Human Breast and Steroid Hormone Therapy.

WILLIAM J. EMERSON *et alii* (*Cancer*, July, 1953) have investigated the pathological aspects of the phases of regression of primary and recurrent carcinoma of the breast during steroid-hormone therapy. They state that there is now histological proof that hormone therapy produces true regressions characterized by degeneration of the tumour cells and cicatrization of the tumour area. A composite picture of the reparative process from early stromal loosening to late scarring and eventual reactivation is drawn from observations in individual cases. Regression is preceded by simultaneous loosening of the stroma and necrobiosis of the malignant cells. Subsequently collagen reforms in the regressing areas and produces tumour-free scars of increased density. These alterations result in the clinical impression of softening, shrinkage and mobilization of the tumour. Quantitatively, regression ranges from partial alterations in limited areas to almost complete fibrosis of a primary tumour and its lymph-node metastases. Similar qualitative changes were observed in tumours from a series of untreated patients in the same age group, but the degree of change was nowhere near the amount observed in the hormone-treated tumours. It appears that a pre-existent reactive response to tumour had been further stimulated by the hormones. Whether the tumour cells are affected directly, or secondarily by way of stroma changes, cannot be established. There is also visual proof that some malignant cells, presumably the source of later reactivations, survive even in extensively regressed tumours, and that this survival is dependent to some degree on the location of the cells within ducts with hyperplastic elastica, lymphatics and densely sclerotic areas. The clinical impression that slowly progressing tumours respond best to treatment is confirmed in the finding that medium-grade and low-grade carcinomata tend to show better responses. The present indication is that, among the primary carcinomata, those characterized by abundant sclerosis and periductal elastic-tissue hyperplasia are particularly susceptible to hormone-induced regression. Similarly constituted tumours failed to regress equally, indicating that the morphology of the stroma of the tumour is not the sole determinant in its response to the hormones. It appears, however, that these regressions are, in part, the result of an unusual hormonal stimulation of a naturally occurring process of repair.

Juvenile Aponeurotic Fibroma (Calcifying Fibroma).

LOUISA E. KEASBEY (*Cancer*, March, 1953) describes the clinical course and pathological features of a distinctive tumour of fibroblastic genesis that occurred in the palmar and plantar musculatures and fat of four children between the ages of two and nine years. She states that the symptomatology is merely that of a very poorly marginated, firm mass, causing neither deformity nor contractions. Skiagrams may be diagnostic, showing a relatively opaque, unattached, soft-tissue mass peppered over with a faint stippling of calcium deposits. The tumour shows an obstinate tendency to recur after primary surgical excision—from two to four times in all the cases reported. In all, apparent tumour control was attained in the end by adequate, conservative surgical excision. The distinctive microscopic picture is that of a highly cellular fibroma, dominated by darkly staining, plump, oval nuclei, arranged in broad septa, and all oriented in one direction; these are supported on sheets of closely packed collagenous fibres. This specific tumour widely infiltrates and overgrows voluntary muscle and fat. In more mature tumours a discrete mass is formed in which the specific tumour pattern is altered by the deposition of calcium granules in peculiar, linear palisades. The formation of chondroid and osteoid is minimal. The name "calcifying juvenile aponeurotic fibroma" is suggested to distinguish this specific neoplasm from other fibromata that it does not resemble.

Sudden Apparently Unexplained Death during Infancy.

JACOB WERNE AND IRENE GARROW (*Am. J. Path.*, July-August, 1953) have made a microscopic study of 31 consecutive cases of infants who had died suddenly while in apparent good health and with gross necropsy findings insufficient to explain death. They state that in all cases there are microscopic inflammatory lesions in the upper and lower parts of the respiratory tract. There are vascular changes both in the respiratory tract and in other organs. The spleen, lymph nodes and thymus show characteristic reactions. The presence of these changes may be regarded as evidence that death is caused by fulminating respiratory disease.

MORPHOLOGY.

Human Premaxillary Bone.

C. R. NOBACK AND M. L. MOSS (*Am. J. Phys. Anthropol.*, June, 1953) discuss the two views concerning the fate of the premaxillary bone in man. One view holds that the maxillary bone overgrows the ectofacial aspect of the premaxillary bone, while the contrary view claims that the maxillary bone and premaxillary bone fuse ectofacially at the incisive suture. The authors present evidence that the part of the maxillary bone in which the incisors are implanted is the premaxilla, and that this bone is not overlaid on its ectofacial surface during development by the maxilla. The overgrowth thesis is based on observations of fœtuses, over nine weeks old—ages after which the incisive suture has been obliterated. No direct observations demonstrating the overgrowth have been presented in the literature.

Quantitative Investigations of Ovarian Follicles.

E. BLOCK (*Acta anat.*, Vol. 14, 1952) calculated the number of primordial, growing and Graafian follicles in 43 autopsy subjects aged from six to forty-four years, the causes of death being accident, suicide or acute illness. The results reported in the literature are widely divergent. The author finds that the number of primordial follicles is clearly influenced by the patient's age. The mean number in the four to ten years group was 484,000, and this number decreased with age until in the thirty-nine to forty-five years group it was 8300. There is wide individual variation as early as the prepubertal age, and in general there is a similarity between the numbers in the right and left ovaries. The mean number of growing

follicles, up to and including those of 100μ in diameter, is 15,200 in the four to ten years group, decreasing with age to 2600 in the thirty-nine to forty-five years group. Here again is wide individual variation as early as the prepubertal years. The number of Graafian follicles is low (10 to 24) in the early prepubertal years and in the preclimacteric years; it is strikingly high in the sixteen-year-old (231); but there is no definite relationship between age and the number of follicles in the ages between eighteen and thirty-eight years (20 to 136).

Pituitary Cytological Changes Associated with ACTH Secretion.

J. C. FINERTY *et alii* (*Anat. Rec.*, September, 1952) state that there has been little agreement on the specific cellular source of pituitary adrenocorticotropic hormone (ACTH) even though much is known concerning its increased discharge and production in response to stress. The author subjected male rats to severe stress by immersing them in water at 70° C. for five seconds, and pituitary cytological studies were made at intervals of one, three, twelve and twenty-four hours later. Increased ACTH secretion was indicated by depletion of adrenal ascorbic acid and by adrenal hypertrophy. Pituitary glands of these rats were studied cytologically by several techniques. Cell type analysis after staining with an azocarmine method revealed no alteration in percentage of pituitary cell types. No change in number or appearance of β or δ types of basophile cells was found, but some increase in methylene blue-staining cytoplasmic basophilia in the acidophile cells was seen after stress. However, considerable increase in acid-hæmatein stainable cytoplasmic granules in the acidophile cells was apparent three, twelve and twenty-four hours after scalding. The authors state that these observations suggest that pituitary cytological changes associated with ACTH secretion following severe burns involve only the acidophile cells, but that neither the azocarmine-staining granules nor the acid-hæmatein-staining granules represent stored ACTH.

Fluorine and Bone Growth.

C. L. COMAR *et alii* (*Am. J. Anat.*, May, 1953) state that fluorine is important in relation to skeletal metabolism and dental pathology in men and animals, and, more recently, domestic animals as a result of the discharge of fluorides into the air from industrial operations. Despite the widespread interest, there have not been sufficient data to provide an accepted view on the possible beneficial role of this element at low levels, or to clarify the mechanisms of its deleterious action at high levels. In the present communication, the interrelated effects of dietary fluorine and feed intake on bone growth, body growth, Ca^{45} behaviour, bone pathology and feed utilization are demonstrated in young pigs. A fluorine level of 1000 parts per million in the ration reduced the appetite and caused a decrease in bone growth, body growth, and feed required per unit of skeletal growth. There was an increase in feed required per unit weight gain. When animals were restricted to the same dietary intake, levels of 200 and 1000 parts per million of fluorine caused a reduction in bone growth. Limiting the dietary intake caused a decrease in bone growth, body growth and feed required per unit of bone growth; however, it caused an increase in feed required per unit of weight gain. Autoradiograms showed that in the fluorine-treated animals a process was occurring which tended to remove the Ca^{45} originally deposited in or directly below the epiphyseal regions. It is suggested that the fluorine intake caused an increased rate of bone resorption in the primary and secondary spongiosa. The proportion of the epiphysis occupied by hypertrophied cartilage cells was found to be a reliable measure of the rate of bone growth under the conditions of this experiment.

Locking at the Knee Joint.

C. H. BARNETT (*J. Anat.*, April, 1953) states that locking of the knee joint—the medial rotation of the femur that occurs as the normal knee is extended—is shown by means of ciné-radiography to commence at least 30° short of full extension, although maximal during the last 10°. In contrast, lateral rotation of the femur as the knee is unlocked is confined to the first few degrees of flexion. This axial rotation probably improves the mechanical efficiency of the joint by reducing the friction wear of the articular surfaces, especially during walking. The conformation of the articular surfaces helps to produce this rotation; early close-packing of the lateral condyle as the knee is straightened restricts further extension of the femur until medial rotation, brought about by the contraction of the quadriceps muscle, has occurred.

Number of Ovarian Follicles in the Newborn.

E. BLOCK (*Acta anat.*, Vol. 17, 1953) states that the number of primordial follicles and the relative number of growing follicles at the earliest stages of development were determined in the ovaries from 10 newborn infants by a mathematical method elaborated by the author. The large follicles were not counted, their number being only estimated. The average number of primordial follicles in seven full-term cases was 733,000. The percentage of growing follicles in ovaries containing Graafian follicles was higher than in those in which this type of follicle was absent. These findings substantiate the author's observations made in earlier investigations that all types of follicle respond to stimulation by gonadotrophins.

Cell Migration in Vertebrate Brains.

H. BERQUIST AND B. KALLEN (*Acta anat.*, Vol. 17, 1953) have previously described the commencement of cell migration in the diencephalon and telencephalon in different vertebrates and have shown that the cell migration begins in special regions of the ventricular wall, the so-called "migration areas". The topographical relations between the areas have been studied by the authors, and the development of the nuclei from the areas has been followed until the adult nuclei could be identified. In the present communication, the areas in the caudal parts of the brain have been studied in different animals and in Homo. The migration areas form in early stages a network consisting of transverse bands and longitudinal columns. In the rhombencephalon there are four longitudinal columns. The dorsal one, which gives rise to the "somato-sensory column", ceases at the isthmus fold. The ventral one, which gives rise to the "somato-motor column", continues rostrally only to the dimesencephalic border. The other two columns, which give rise to the "viscero-sensory" and "viscero-motor columns", form the rest of the mesencephalon, the whole of the diencephalon and the telencephalon. The transversal rhombencephalic bands correspond to the cranial nerves and probably to the rhombomeres.

Influence of Thymus and Thyroid on Post-Natal Growth of Lymphatic Tissue.

L. GYLLENSTEN (*Acta anat.*, Supp. 18, Vol. 17, 1953) states that subtotal thymectomy in newborn guinea-pigs caused a lymphatic hyperplasia, as compared with control animals subjected to sham operation. Two weeks after the operation an increase of the total mass of lymph nodes was found. This increase was statistically highly significant whether calculated in milligrammes or in milligrammes per gramme of body weight. All regional lymph nodes took part in the general increase, and no differences as regards the increase were found between the different groups of lymph nodes. No sexual differences were demonstrated as regards the lymph node mass or increase. Peyer's patches likewise increased. No statistically significant increase of the weight of the spleen was found after partial thymectomy, though a certain indication of a slight increase was demonstrated in female animals. The lymphatic hyperplasia after partial thymectomy in newborn guinea-pigs was transitory. Four weeks after the operation no statistically significant differences between the lymphatic organs of partially thymectomized animals and controls could be computed. Two weeks after subtotal thymectomy the mean thyroid weight and the mean acinar cell height were greater than in the control animals subjected to sham operation, and the differences were statistically highly significant. At four weeks after the operation no significant differences were found, though the mean thyroid weight still was greater in the animals subjected to subtotal thymectomy than in the controls. Thyroxine injections in young guinea-pigs over a period of two weeks caused a lymphatic hyperplasia. In young guinea-pigs subjected to partial thymectomy, the increase of thyroid weight and mean acinar cell height after injections with thyrotropic hormone was greater than in controls injected with the same amounts of hormone, and the difference was statistically highly significant. The increase was significantly greater than was the increase of thyroid weight and acinar cell height after subtotal thymectomy only. Partial thymectomy thus caused an augmentation of the thyroid response to stimulation by thyrotropic hormone. No sex differences were found. No hypertrophy of the thyroid cells could be demonstrated in guinea-pigs given injections of urine from partially thymectomized guinea-pigs (as claimed by Comsa). However, a statistically significant increase of thyroid weight was found after the injections.

British Medical Association News.

ANNUAL MEETING.

THE annual meeting of the Victorian Branch of the British Medical Association and of the Medical Society of Victoria was held at the Medical Society Hall, Albert Street, Melbourne, on December 2, 1953, DR. LEONARD BALL, the President, in the chair.

ELECTION OF OFFICE BEARERS AND MEMBERS OF COUNCIL.

The Medical Secretary announced that the Council had elected the following office bearers:

President: Dr. G. R. Weigall.

Vice-Presidents: Dr. H. G. Furnell, Dr. T. G. Swinburne.

Chairman of Council: Dr. H. C. Colville.

Honorary Treasurer: Dr. L. Ball.

Honorary Secretary: Dr. M. O. Kent Hughes.

Honorary Librarian: Dr. J. G. Johnson.

The Medical Secretary announced that the following had been elected members of the Council by the general body of members: Dr. C. Byrne, Dr. V. L. Collins, Dr. H. G. Furnell, Dr. K. H. Hallam, Dr. H. G. Hiller, Dr. H. M. James, Dr. L. W. Johnston, Dr. M. O. Kent Hughes, Dr. W. E. King, Sir Peter MacCallum, Dr. G. Newman Morris, Major-General F. Kingsley Norris, Dr. B. K. Rank, Dr. Robert Southby.

The Medical Secretary announced that the following had been elected members of the Council by the subdivisions: Dr. W. R. Angus, Dr. Leonard Ball, Dr. D. A. Carter, Dr. N. L. Dodd, Dr. A. B. Hewitt, Dr. J. G. Johnson, Dr. H. G. Judkins, Dr. D. G. MacKellar, Dr. A. B. McCutcheon, Dr. Leo Neal, Dr. F. R. Phillips, Dr. Donald Pryde, Dr. C. A. M. Renou, Dr. M. Robinson, Dr. E. Sandner, Dr. J. J. Searby, Dr. T. G. Swinburne and Dr. G. R. Weigall.

The General Secretary announced that the ex-officio members of the Council were: Dr. H. C. Colville, Dr. F. L. Davies, Sir John Newman Morris, Dr. D. Roseby, Dr. D. J. Thomas (trustees of the Medical Society of Victoria), Dr. J. P. Major (director of the Australasian Medical Publishing Company, Limited). A representative of the Victorian Medical Women's Society was Dr. Elizabeth McComas.

ANNUAL REPORT OF THE COUNCIL.

The Annual Report of the Council which had been circulated among members was received and adopted on the motion of Dr. T. G. Swinburne, seconded by Dr. H. G. Furnell. The report is as follows:

The Council of the Branch and the Committee of the Society present the seventy-fourth annual report of the Branch and the ninety-eighth of the Society.

Election.

At the annual meeting held last December the following members of the Council and of the committee were elected: Dr. C. Byrne, Dr. V. L. Collins, Dr. H. G. Furnell, Dr. K. H. Hallam, Dr. H. G. Hiller, Sir Victor Hurley, Dr. H. M. James, Dr. L. W. Johnston, Dr. M. O. Kent-Hughes, Dr. J. H. Lindell, Sir Peter MacCallum, Major-General F. Kingsley Norris, Dr. B. K. Rank and Dr. Robert Southby.

The following were elected to represent the subdivisions: Dr. W. R. Angus, Dr. L. H. Ball, Dr. M. H. Box, Dr. D. D. Browne, Dr. D. A. Carter, Dr. W. J. Flanagan, Dr. P. Goodman, Dr. A. B. Hewitt, Dr. J. G. Johnson, Dr. H. G. Judkins, Dr. A. B. McCutcheon, Dr. D. G. MacKellar, Dr. L. A. Neal, Dr. Donald Pryde, Dr. C. A. M. Renou, Dr. M. Robinson, Dr. G. Swinburne, Dr. G. R. Weigall.

On the retirement of Dr. Goodman from the Council owing to his leaving the Bendigo Subdivision, Dr. E. Sandner was elected in his place.

Under Rule 9 of the Branch, Council elected Dr. Elizabeth McComas, who was nominated by the Victorian Medical Women's Society.

The following are ex-officio members: the trustees of the Medical Society of Victoria, Dr. H. C. Colville, Dr. F. L. Davies, Sir John Newman-Morris, Dr. D. Roseby and Dr. D. J. Thomas, and the Director for Victoria of the Australasian Medical Publishing Company, Limited, Dr. J. P. Major.

Cooption: Dr. K. Brennan, Dr. A. H. Melville and Dr. G. Newman Morris were coopted members of the Council.

The Council elected the following office bearers:

President: Dr. Leonard Ball.

Vice-Presidents: Dr. G. R. Weigall and Dr. H. G. Furnell.

Chairman of Council: Dr. H. C. Colville.

Honorary Treasurer: Dr. Douglas Thomas.

Honorary Librarian: Dr. J. G. Johnson.

Honorary Secretary: Dr. H. G. Hiller.

The Executive consisted of the President, the Immediate Past President, Dr. Charles Byrne, and the other office bearers.

Attendances at Council Meetings.

Twelve meetings of the Branch Council were held, the following showing the attendances:

Dr. K. H. Hallam	12	Major-General F. Kingsley Norris	8
Dr. J. Gavin Johnson	12	Dr. K. Brennan	7
Dr. Leonard Ball	11	Dr. W. R. Angus (represented by substitute at three meetings)	6
Dr. M. H. Box	11	Dr. J. P. Major	6
Dr. H. C. Colville	11	Dr. A. B. Hewitt	5
Dr. H. M. James	11	Dr. J. H. Lindell	5
Dr. Elizabeth McComas	11	Sir Peter MacCallum	5
Dr. B. K. Rank	11	Dr. C. A. M. Renou	5
Dr. G. R. Weigall	11	Dr. M. Robinson	5
Dr. Charles Byrne	10	Dr. D. D. Browne (represented by substitute at one meeting)	4
Dr. H. G. Hiller	10	Dr. P. Goodman[3]	4
Sir Victor Hurley	10	Sir John Newman-Morris	4
Dr. A. B. McCutcheon	10	Dr. E. Sandner[3]	4
Dr. R. Southby	10	Dr. A. H. Melville	3
Dr. F. L. Davies	9	Dr. W. J. Flanagan[1]	2
Dr. H. G. Furnell	9	Dr. G. Newman Morris[4]	2
Dr. M. O. Kent-Hughes	9	Dr. L. A. Neal	1
Dr. D. Pryde	9	Dr. D. G. MacKellar	0
Dr. D. Roseby	9	Dr. D. J. Thomas	0
Dr. G. Swinburne	9		
Dr. D. A. Carter	8		
Dr. V. L. Collins	8		
Dr. L. W. Johnston	8		
Dr. H. G. Judkins	8		

The highest attendance at any one meeting was 33, and the average attendance was 26.

Appointment of Subcommittees.

The following subcommittees were appointed by Council at the beginning of the year (the first-named acting as convener of the subcommittee):

Ethics.—Dr. Major, Dr. Davies, Sir Victor Hurley, Dr. McCutcheon, Sir John Newman-Morris and the Executive.

Finance, House and Library.—Dr. Thomas, Dr. Ball, Dr. Furnell, Dr. Gavin Johnson and Major-General Norris.

Legislative.—Dr. Davies, Dr. Byrne, Dr. Colville, Dr. Rank and Dr. Renou.

Organization.—Dr. Swinburne, Dr. Ball, Dr. Box, Dr. Brennan, Dr. Byrne, Dr. Colville, Dr. Furnell, Dr. J. G. Johnson, Dr. L. W. Johnston, Dr. Judkins, Dr. Kent-Hughes, Dr. McComas, Dr. McCutcheon, Dr. Neal, Dr. Pryde, Dr. Rank, Dr. Renou, Dr. Roseby, Dr. Southby, Dr. Weigall and representatives of the country subdivisions.

Science.—Sir Peter MacCallum, Dr. Collins, Dr. Hallam, Dr. L. W. Johnston, Dr. Lindell and Major-General Norris.

Hospital.—Dr. Southby, Dr. Ball, Dr. Brennan, Dr. Collins, Dr. Colville, Dr. Hallam, Sir Victor Hurley, Dr. James, Dr. Kent-Hughes, Dr. Lindell, Dr. Melville, Dr. Neal and Dr. Weigall.

Correspondence.—Dr. Colville and Dr. Hiller.

Workers' Compensation.—Dr. Ball, Dr. Byrne, Dr. Colville, Dr. Kent-Hughes, Dr. Rank, Dr. Renou and Dr. Roseby.

Publicity.—Dr. Ball, Dr. Byrne, Dr. Swinburne, Dr. Thomas and the Medical Secretary.

Building.—The President, Honorary Treasurer, Honorary Secretary and Dr. Coates.

Social.—Dr. Roseby, Dr. Swinburne and Dr. Weigall.

Committee Appointed to Deal with Anomalies in the Schedules of Benefits Under the National Health Scheme.—Dr. Ball, Dr. Davies, Sir Victor Hurley, Dr. Hallam, Dr. Johnston, Dr. King, Dr. Southby and Dr. Wakefield.

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[1] Granted leave of absence during the year.
[2] Retired in July.
[3] Elected in July.
[4] Elected in August.

Appointments and Nominations.

Anti-Cancer Council of Victoria.—Dr. J. E. Clarke and Dr. H. Searby.

Medical and Scientific Committee Anti-Cancer Council.—Sir Victor Hurley.

Australian Aerial Medical Service.—Sir John Newman-Morris.

Australian and New Zealand Association for the Advancement of Science.—Thirtieth meeting, Canberra, 1954: Sir Peter MacCallum.

British Medical Association Annual Representative Meeting, Cardiff, 1953.—Representative, Dr. C. H. Dickson; deputy representative, Dr. W. J. Flanagan.

British Medical Association, Central Council.—Dr. M. L. Formby.

British Medical Association in Australia, Federal Council.—Dr. Charles Byrne, Dr. H. C. Colville and Dr. Robert Southby.

"British Medical Journal" Victorian Correspondent.—Dr. H. G. Hiller.

British Medical Agency of Victoria Proprietary, Limited.—Dr. C. H. Dickson, Major-General F. Kingsley Norris, Dr. G. Robinson and Dr. D. J. Thomas.

British Medical Insurance Company of Victoria, Limited.—Directors: Sir John Newman-Morris (chairman), Dr. C. H. Dickson, Dr. H. G. Furnell, Sir Victor Hurley, Dr. W. W. S. Johnston and Major-General F. Kingsley Norris.

Central Medical Library Committee.—Dr. J. G. Johnson.

Conjoint Committee with the Friendly Societies Association of Victoria.—Dr. Charles Byrne, Dr. C. H. Dickson and Dr. J. G. Johnson.

Consultative Council on Influenza.—Dr. K. D. Fairley.

Consultative Council on Quarantinable Diseases.—Dr. P. Gilbert.

Consultative Council on Maternal Mortality.—Dr. J. G. Johnson.

Dietetic Association of Victoria.—Dr. T. A. F. Heale.

Federal Medical War Relief Fund Advisory Committee.—Dr. F. L. Davies, Dr. D. J. Thomas and Dr. W. G. D. Upjohn.

Fellowship of Christian Healing.—Dr. A. Murray Clarke, Dr. Arthur J. Day, Dr. J. G. Johnson, Dr. H. G. Judkins, Dr. R. Southby and Professor L. Townsend.

Free Kindergarten Union.—Dr. H. Boyd Graham.

Hospital Benefits Association of Victoria.—Dr. C. H. Dickson, Major-General F. Kingsley Norris, Dr. D. Roseby and Dr. G. R. Weigall.

Hospital Benefits Association of Victoria Medical Advisory Subcommittee.—Dr. M. O. Kent-Hughes and Dr. C. A. M. Renou.

Joint Insurance Adjudication Committee.—Dr. L. H. Ball, Dr. D. Roseby and Dr. W. G. D. Upjohn.

Lord Mayor's Fund.—Sir John Newman-Morris.

Committee of Lord Mayor's Country Children's Holiday Camp.—Dr. Gwynne Villiers.

Masseurs' Registration Board.—Dr. C. Hembrow and Dr. Leigh T. Wedlick.

Medical Officers' Relief Fund (Federal) Advisory Committee.—Dr. F. L. Davies, Dr. D. J. Thomas and Dr. W. G. D. Upjohn.

"The Medical Journal of Australia" Victorian Correspondent.—Dr. H. G. Hiller.

Trustees of the Medical Society of Victoria.—Dr. H. C. Colville, Dr. F. L. Davies, Sir John Newman-Morris, Dr. D. Roseby and Dr. D. J. Thomas.

Medico-Pharmaceutical Liaison Committee.—Dr. Roseby, Dr. Byron Stanton, Dr. Thomas, the President (*ex officio*) and the Medical Secretary.

Melbourne Permanent Post-Graduate Committee.—Sir Peter MacCallum, Dr. J. P. Major and Dr. G. R. Weigall.

Museum Curator.—Dr. H. Boyd Graham.

National Committee of British Commonwealth Collection of Microorganisms.—Professor S. D. Rubbo.

National Safety Council of Australia.—Dr. John Gowland.

Nurses' Board.—Dr. W. M. Lemmon and Dr. I. G. McLean.

The Occupational Therapy School of Victoria.—Dr. D. O. Longmuir.

Opticians' Registration Board.—Dr. F. G. Fenton and Dr. S. Gerstman.

Pensioner Medical Service: Committee of Inquiry.—Sir Victor Hurley, Dr. C. Byrne, Dr. H. C. Colville and Dr. J. G. Johnson.

Advisory Subcommittee to the Red Cross Blood Transfusion Service.—Dr. Charles Byrne.

Rotary Club (Citizens' Committee).—The President of the Branch.

Services Recognition Fund (Formerly Legacy Fund).—Dr. A. E. Coates, Major-General F. Kingsley Norris and Dr. D. J. Thomas.

Society for Crippled Children.—Dr. H. Boyd Graham.

Standards Association of Australia.—Dr. D. O. Shiels.

Standards Association of Australia: Committee on Standard Measuring Cups and Spoons.—Dr. T. A. F. Heale.

Standards Association of Australia: Sectional Committee on Industrial Respiratory Protective Devices (Victorian Section).—Dr. D. L. G. Thomas.

Standards Association of Australia (Victorian Division): Committee on Hospital Furnishings and Equipment.—Dr. J. H. Lindell.

State Medical Planning Committee.—Dr. H. G. Furnell.

Victorian Baby Health Centres' Association.—Dr. M. L. Powell.

Victorian Bush Nursing Association.—Dr. E. McComas.

Victorian Council of Speech Therapy.—Dr. R. Southby.

Victorian Documentary Film Council Advisory Committee on Scientific Films.—Dr. R. S. Hooper and Dr. Morris Davis.

World Medical Association Supporting Committee (Victoria).—Dr. D. Roseby, Dr. K. H. Hallam and Sir Peter MacCallum.

Branch Convocation.

The following were elected for the year 1953: *Melbourne Central*: Dr. C. J. O. Brown, Dr. J. Grayton Brown, Dr. J. E. Clarke, Dr. E. E. Dunlop, Dr. C. H. Fitts, Dr. J. L. Frew, Dr. H. Boyd Graham, Dr. R. S. Lawson, Dr. Kate Mackay, Dr. J. O'Sullivan, Dr. G. Penington, Dr. S. Reid, Dr. J. E. Sewell, Dr. G. Springthorpe, Dr. G. M. Tallent. *Eastern Suburban*: Dr. J. D. Begg, Dr. W. L. Carrington, Dr. A. S. Ferguson, Dr. J. Gabriel, Dr. W. E. Hewitt, Dr. H. J. Hosking, Dr. E. E. Mackay, Dr. J. G. McMahon, Dr. Ray Penington, Dr. J. Simpson, Dr. G. Watters. *Northern Suburban*: Dr. J. E. Dunn, Dr. R. Gurry, Dr. D. C. Lear, Dr. A. B. Swain, Dr. H. R. Walker, Dr. I. D. Wilson. *North-Eastern Suburban*: Dr. M. Ashkenasy, Dr. J. Cockerill, Dr. W. Heslop, Dr. C. F. MacGillicuddy. *Southern Suburban*: Dr. A. L. Giblin, Dr. L. Middleton, Dr. T. O. Sayle, Dr. Norman L. Speirs, Dr. H. F. Tucker, Dr. D. Zacharin. *South Central*: Dr. R. D. Aitchison, Dr. D. Bodycomb, Dr. M. M. Perl, Dr. J. Smibert, Dr. A. McQ. Thomson, Dr. Charles Wilson. *South-Eastern Suburban*: Dr. V. C. Brown, Dr. C. C. Dyte, Dr. B. D. Fethers, Dr. G. Foreman, Dr. E. Kirsner, Dr. G. L. Lillies, Dr. L. Nicholson, Dr. G. W. Patterson, Dr. R. M. Shaw. *Western Suburban*: Dr. L. Gurry, Dr. L. Joel, Dr. E. F. J. Smith. *Ballarat*: Dr. E. R. G. Sheil. *Bendigo*: Dr. A. Newson, Dr. W. Rosenthal, Dr. E. Sandner. *Geelong*: Dr. R. L. Fulton, Dr. D. A. Kidd, Dr. K. Langlands. *Gippsland*: Dr. Alan Crooke, Dr. W. F. Ferguson, Dr. D. G. Phillips. *Goulburn*: Dr. J. B. McMiken, Dr. R. O. Mills. *North-Eastern Country*: Dr. W. Gove, Dr. H. Marks. *North-Western Country*: Dr. S. Rabl, Dr. J. J. Searby. *South-Western*: Dr. A. E. Brauer, Dr. G. Watson.

Membership Roll.

The number of members on the roll at October 19, 1953, was 2510, which was 133 more than last year. Two hundred and eighty-three members were added (162 by election, 38 were reinstated by payment of arrears, and 83 were transferred from other States and overseas) and 150 names were removed (21 by death, 67 by transfer, 14 by resignation, and 48 allowed their subscriptions to fall into arrears).

Honorary medical members number 35, and there are two complimentary members.

Honorary student associates number 50.

Deceased.

The death of the following members and former members is recorded with regret: Dr. G. Winter Ashton, Dr. George Brew, Dr. Hilda Bull, Dr. H. J. Cahill, Dr. H. T. Chapman, Dr. Frank Clark, Dr. J. B. Cole, Dr. Charles Cunningham, Dr. John Dale, Dr. G. M. Davies, Dr. Frank Donovan, Dr. Leo Doyle, Dr. J. M. Eadie, Dr. G. W. Foster, Dr. Hilda Gardner, Dr. Keith Gay, Dr. L. A. Hardy, Dr. W. de Witt

Henty, Dr. Margaret Hutchings, Dr. Morris Jacobs, Dr. Charles Kellaway, Dr. J. A. Le Page, Dr. Charles V. Mackay, Dr. C. M. McKnight, Dr. F. C. Oliphant, Dr. R. F. O'Sullivan, Dr. G. E. M. Scott, Dr. J. H. Sleeman, Dr. K. R. Speeding, Dr. R. G. Stott, Dr. K. R. Trembath, Dr. Kevin Young.

After the death of Dr. John Dale in September, 1952, the Branch Council recorded the following special minute:

> The Council of the Victorian Branch of the British Medical Association records with regret the death of John Dale, O.B.E., M.D., M.R.C.S., L.R.C.P., B.Sc., who was a member of Council from 1928 until 1950 and President of the Branch in 1945. As Medical Officer of Health of the City of Melbourne from 1927 to 1950, Dr. Dale's work in public health and particularly in relation to child welfare was oustanding, and Council extends its sympathy to his family.

In memory of the late Dr. G. Winter Ashton, in August, 1953, the Branch Council recorded the following special minute:

> The Council of the Victorian Branch of the British Medical Association records with very great regret the death of John Gerard Arthur Winter Ashton, M.D., M.S., F.R.A.C.S. As a member of the Branch Council from 1938 to 1941 and Honorary Secretary of the Branch during 1940 and 1941 he served his colleagues in the profession. From 1934, when he became a clinical assistant, until the time of his death, when he was an honorary consulting surgeon, he gave unselfish service to the community through Prince Henry's Hospital. He will be remembered also for his interest in the construction of hospitals and the work and time he gave to Prince Henry's Hospital in this direction, as well as the help he gave towards the establishment of St. George's Hospital in Kew. In his struggle against grave difficulties during a long illness, he earned the respect of his colleagues. The Council extends its sympathy to Mrs. Ashton and the members of his family.

Congratulations.

During the year Council had pleasure in congratulating the following: Major-General F. Kingsley Norris, C.B., C.B.E., D.S.O., E.D., Major-General Sir Clive Steele, K.B.E., D.S.O., M.C., V.D., and Dr. A. E. Rowden White, C.M.G., as recipients of honours conferred upon them by Her Majesty Queen Elizabeth II; Sir Peter MacCallum on being created a Knight Bachelor; Sir Macfarlane Burnet on his election as a Fellow of the Royal College of Physicians; Dr. A. E. Coates on being elected an Honorary Fellow of the Royal College of Surgeons; Dr. J. H. Lindell on his appointment as Chairman of the Hospitals and Charities Commission; Professor B. T. Mayes on being awarded the Sims-Black Professorship of the Royal College of Obstetricians and Gynæcologists, London, for 1954.

Church Services.

The fourth annual church services for the medical profession were held on Sunday, February 8, 1953, at Saint Paul's Cathedral and Saint Patrick's Cathedral and were very well attended. Members assembled in the precincts of the cathedrals and entered in procession. At Saint Paul's Cathedral the preacher was the Dean of Melbourne (the Very Reverend Roscoe Wilson), and at Saint Patrick's Cathedral the celebrant was the Reverend Father P. Fitzpatrick and the preacher the Reverend Father R. McCarthy, S.J. These services have become a feature of the Branch's annual activities.

American Visitors: Voluntary Health Insurance Experts.

At the invitation of the Commonwealth Government, Mr. W. S. McNary, Chief Executive Officer of the Blue Cross Association (United States of America), and Mr. E. C. Van Steenwyk, Public Relations Officer of the Blue Cross Association and Chief Executive Officer of Associated Hospital Service of Philadelphia (United States of America), visited Australia in April to give advice about the Government's medical benefits scheme. In Melbourne they addressed meetings of many organizations interested in health insurance, and their wide knowledge and experience in this field made their addresses very interesting. A special meeting of the Branch was held on April 22 to give members an opportunity of hearing Mr. McNary and Mr. Van Steenwyk.

The Stawell Memorial Prize for 1952.

The Stawell Memorial Prize for 1952 was awarded to Dr. Alfred J. Barnett and Dr. J. R. E. Fraser for their combined essay on "Peripheral Vascular Disease". The prize was presented at the 1953 August meeting of the Branch.

Golf.

The fourteenth annual golf tournament of the Branch was held on Thursday, November 20, 1952, at the Royal Melbourne Golf Club on the East course at Cheltenham. The Championship Cup (The Weigall Cup) was won by Dr. K. Summons, and the Handicap Cup (The Roseby Cup) by Dr. A. R. Tate. The spoon competition was won by Dr. J. W. Gardiner and Dr. A. R. Tate.

Entertainment.

On December 22, 1952, following their registration, the Council entertained new graduates at afternoon tea.

On March 30, 1953, the graduates who passed in the supplementary examinations were entertained.

To wish the Medical Secretary and Mrs. Dickson a happy trip, the President and Mrs. Ball gave a late afternoon party at the Union House, University, on Friday, April 10, 1953.

On April 22, before the special meeting of the Branch addressed by Mr. W. S. McNary and Mr. E. C. Van Steenwyk, the visiting American voluntary health insurance experts, the President entertained the speakers at dinner at the Athenæum Club.

Meetings of the Branch.

The following meetings of the Branch were held in Melbourne:

April.—The ninth triennial Syme Memorial Lecture entitled "Since Syme: Transformation and Dissociation" was delivered by Dr. W. G. D. Upjohn.

June.—An address, "Arterial Degeneration and Some of its Consequences", by Dr. A. Tait Smith.

August.—An address, "The Selection of Patients for Mitral Valvotomy", by Dr. Allan Wynn.

October.—The twentieth Sir Richard Stawell Oration, "Tomorrow's Engineering Development in Victoria", which was delivered by Major-General Sir Clive Steele, K.B.E., D.S.O., M.C., V.D.

The following clinical meetings and demonstrations were held:

March.—Repatriation General Hospital.

May.—Alfred Hospital.

July.—Royal Melbourne Hospital.

August.—Department of Pathology, University of Melbourne.

September.—Austin Hospital.

November.—The Victorian Eye and Ear Hospital.

Special General Meetings.—Following directives issued by the Hospitals and Charities Commission in regard to the use of state-aided hospitals by private medical practitioners and the keeping of medical records of private patients in those hospitals, and negotiation between the Council and the Commission, a special general meeting of the Branch was held to discuss the matter on July 22. Reference to this matter is made under "Business of Council".

On April 22 a special meeting was addressed by Mr. W. S. McNary and Mr. E. C. Van Steenwyk, United States Voluntary Insurance experts.

The following meetings were held in the country:

March.—Hamilton. In the afternoon clinical cases were presented at the Base Hospital and in the evening Dr. Russell Howard delivered a lecture on "Some Thoraco-Abdominal Conditions in Childhood".

November.—Ballarat. Clinical cases were presented at the Base Hospital in the afternoon. In the evening Dr. Colin Macdonald gave an address entitled "A Trio of Story-Tellers".

The Branch Council expresses its appreciation and thanks to the committees and the honorary secretaries of the country subdivisions for their work in making arrangements for the country meetings. It also wishes to thank the wives of members of the subdivisions for their hospitality to visiting members and their wives, and the committees of base hospitals for the provision of facilities.

The Branch Council would also like to thank the staffs of the Repatriation General Hospital, the Alfred Hospital, the Royal Melbourne Hospital, the Austin Hospital and the Victorian Eye and Ear Hospital for arranging interesting and successful clinical meetings.

The staff of the Pathology Department of the University is also thanked for the excellent demonstration held in August.

Armistice Day.

On Wednesday, November 11, 1953, a short ceremony was held in the foyer of the Medical Society Hall in honour of the Victorian Medical Officers who lost their lives in the service of the Empire in the wars of 1914-1918 and 1939-1945. Following the reading of the names of doctors who had been killed or died on service, the President laid a wreath on the War Memorial.

Business of Council.

National Health Service.

The most important matters with which the Branch Council has been concerned during the past year have been the various aspects of the Commonwealth Government's National Health Service. The position at the beginning of the year was that the medical profession was cooperating with the Government in regard to providing the Pensioner Medical Service and pharmaceutical benefits. A hospital benefits scheme was also being operated. These services were being provided under regulations under the *National Health Service Act*, 1948, the *Pharmaceutical Benefits Act*, 1947, and the *Hospital Benefits Act*, 1951, the first two being legislation introduced by the Chifley Government.

The final stage in the plans of the Minister for Health for a National Health Service was the introduction of a medical benefits scheme.

It was the expressed wish of the profession throughout Australia that cooperation in the provisions of the proposed National Health Service should be contingent upon the repeal of the various existing Acts and their consolidation under one *National Health Act*. A bill for this Act was brought down by the Minister for Health early in the year, but after the second reading stage had been reached, Parliament adjourned. The work of the Branch Council and of the Federal Council during the year has been directed mainly toward having undesirable parts of the bill deleted and anomalies corrected. Various conferences have been held between representatives of the Federal Council and Sir Earle Page, the last being on October 10, when the Minister agreed to a number of amendments suggested. At the same conference the Minister was informed of anomalies in the Schedules of Benefits under the Medical Benefits Scheme, these having been pointed out with the idea of forestalling criticism of the scheme not only by members of the profession, but by the public generally.

In Victoria the Medical Benefits Scheme has been running reasonably smoothly since its inception on July 1. Relations between the medical profession and the benefit organizations are very amicable. Meetings have been held between representatives of the Branch Council and of the benefit societies and details of machinery discussed and minor difficulties ironed out.

Whilst there is provision in the medical benefits scheme for either the refund or direct method of payment being used, the Branch Council is very strongly of the opinion that the success of the scheme rests on the use of the refund system. To this end a method whereby direct payment will be made only in cases of financial hardship was evolved and members were informed of this by circular on September 7.

Hospitals and Charities Commission.

Following directives issued by the Hospitals and Charities Commission stating that medical records of private patients in state-aided hospitals were to be kept by private medical practitioners, the Executive of the Branch Council, and subsequently the Council itself, requested members not to comply with these directives. The Commission also issued directives in regard to conditions under which private medical practitioners were to be permitted to use state-aided hospitals (such as the Mordialloc-Cheltenham Community Hospital) and stating that it would be necessary for them to seek the "approval" of the appropriate hospital committee. The Branch Council requested members not to seek approval or comply with undesirable conditions, and negotiations took place between the Commission and representatives of the Council on these matters. Members were kept fully informed of the negotiations and of the opinion of the Branch Council, and at a special general meeting of the Branch on June 26 the following resolution was passed:

> That this special meeting of the members of the Victorian Branch of the British Medical Association, having read and heard the explanations of the requests of the Hospitals and Charities Commission regarding the keeping of records and the right of doctors to attend private and intermediate patients in state-aided hospitals, endorses the views of the Council of the Branch. It agrees with the Council that the instructions of the Commission to hospital boards are opposed to public interest and it expresses its confidence in the Council in its handling of this matter.

The directives were not enforced.

Since the appointment of the new Commission an invitation has been received by the Branch Council to nominate two representatives to the Advisory Council of the Commission, one to represent metropolitan interests in regard to hospital matters and one to represent the interests of country members. The Council views this invitation as indicative of a better future relationship with the Commission.

Hospital Policy.

Members are aware that the policy of the Branch Council in relation to honorary medical service is that there should be no extension of such service, and following numerous requests from country subdivisions and members holding hospital appointments in the country, detailed information is being obtained about the terms and conditions of appointment of medical practitioners to country hospitals. Opinions in regard to the discontinuance of honorary medical service are also being obtained. The Hospital Subcommittee is at present formulating submissions for the Branch Council on these aspects of service to country hospitals. A policy in relation to the aims, objects and staffing of suburban public hospitals is also being discussed by the Hospital Subcommittee.

Pensioner Medical Service.

No major changes have occurred in the Pensioner Medical Service during the past year. Following a request from the Minister for Health the Council nominated several members, from whom he appointed a State Committee of Inquiry to deal with abuses by members of the profession under the service. The Commonwealth Government sought to include in the Pensioner Medical Service blind pensioners without a means test. In this connexion the Council reaffirmed its previously expressed principle that the service should not be extended to further groups without a means test.

Limitation of Medical Students.

Discussion of this matter, following a conference with the Faculty of Medicine and the receipt of a letter from the Students' Representative Council, resulted in the following resolutions being passed by the Branch Council and forwarded to the Council of the University and the President of the Students' Representative Council:

> 1. That the Council of the Victorian Branch of the British Medical Association regrets that the University considers it necessary to limit the number of students entering the medical course.
>
> 2. That the Anatomy and Physiology Departments be provided with extra facilities and teaching staff in order to accept students in accordance with the capacity of the clinical schools, the present capacity being 210 students per year.
>
> 3. That as a long-range policy, new medical schools should be provided.
>
> 4. That the Victorian Branch of the British Medical Association support an approach to the Government for additional necessary finance to implement these suggestions.
>
> 5. That the Council urge the Faculty of Medicine to give further consideration to the position of those students who, having passed the pre-medical examination, are unable to proceed with their medical studies.

The Dangerous Drugs and Specified Drugs Regulations.

Following the establishment of a Drug Bureau in the Victorian Police Department, the regulations relating to dangerous and specified drugs are being more strictly

enforced, and at a meeting of the Medico-Pharmaceutical Liaison Committee it was decided to circulate information to members regarding the obligations of a medical practitioner under the regulations. The numerous inquiries received in the Branch office following the distribution of the circular indicated members' ignorance of their obligations, and Council stresses the necessity for records being kept in accordance with the regulations and for the required details being included in prescriptions. So that members will be in possession of up-to-date information, it has been decided to publish additions to the lists of dangerous and specified drugs in the monthly notice paper and in THE MEDICAL JOURNAL OF AUSTRALIA.

After Hours Calls.

Early in the year a letter was sent out over the signature of the President pointing out the moral obligation of a medical practitioner to answer night and week-end calls. Despite the circulation of this letter, however, many complaints of non-attendance are being received by the Branch Office.

In addition to the above, many Branch matters of a comparatively minor nature have been dealt with by both the Branch Council and the Executive, some of which members have been informed of through the circulation of resolutions of the Council. A great deal of business arising from the activities of the Federal Council has not been mentioned here, as full reports of the meetings of the Federal Council appear in THE MEDICAL JOURNAL OF AUSTRALIA.

Overseas Visit of Medical Secretary.

It was decided by the Branch Council that Dr. Dickson should make an overseas visit, and accordingly he flew from Sydney to San Francisco in April, spending one month in North America where he had the opportunity of seeing the work of the American and Canadian Medical Associations and some of the Blue Shield and Blue Cross organizations. From America he proceeded to England where he attended a session of the International Hospital Congress, the annual meeting of the British Medical Association at Cardiff, the first International Congress on Medical Librarianship, the World Conference on Medical Education and the seventh general assembly of the World Medical Association at The Hague.

Dr. Dickson returned to Melbourne in October and the information obtained by him during his tour abroad will be of great value to the Branch.

Federal Council.

The Federal Council met in Sydney in February and in Adelaide in October. Conferences between the Minister for Health and representatives of the Federal Council to discuss the Medical Benefits Scheme and the National Health Bill took place in December and May, and a meeting of the Executive of the Federal Council was held in October.

A report of the proceedings of the February meeting was published in THE MEDICAL JOURNAL OF AUSTRALIA of April 18, 1953, and a report of the proceedings of the October meeting will appear in a future issue of the journal.

The General Secretary of the Federal Council, Dr. J. G. Hunter, attended the April meeting of the Branch Council, and, after giving a comprehensive survey of the political situation in regard to the National Health Bill and the Medical Benefits Scheme, he outlined the provisions of the National Health Bill, emphasizing particularly those clauses which were not acceptable to the profession.

The Branch's representatives on the Federal Council were: Dr. H. C. Colville (Vice-President of the Federal Council), Dr. Charles Byrne and Dr. Robert Southby.

The Library of the Medical Society of Victoria.

During the year there has been a noticeable decrease in the number of books and journals borrowed, and this is attributed in part to the development of hospital libraries and in part to the introduction of the "owner-onus" parking regulations, which have made it very difficult for members to park their cars within reasonable distance of the library. Members are therefore reminded that, for their convenience, the library is open each day (Monday to Friday) from 8.45 a.m. to 6.30 p.m., and books may be collected or returned at any time during this period.

During the year 89 books were added to the library and a subscription taken out for *Family Doctor*. The Branch Council records its appreciation of the generosity of the British Medical Insurance Company of Victoria, Limited, THE MEDICAL JOURNAL OF AUSTRALIA and the *Australian and New Zealand General Practitioner*, all of whom by grant or donation have increased our holdings of books and journals. Others to whom we are indebted are Dr. K. G. Colquhoun, Dr. K. Fairley, Dr. J. K. Monk, Dr. M. D. Silberberg, Dr. I. D. Thomas, the United States Information Library, and all those members who so generously donated journals (in many cases complete sets), which are now being used to build up holdings in the newer libraries. We are also grateful to Miss E. J. Foster for making available the contents of the library of her brother, the late Dr. G. W. Foster, and to members who have reviewed books or journals on our behalf. Owing to the good offices of the former librarian, Mrs. Donner, when attending the First International Conference on Medical Librarianship in England, we are indebted to the Karolinska Institutets Bibliotek, Stockholm, for supplements to the *Scandinavian Acta*-periodicals (and these will continue to be supplied from time to time) and to the Bellevue Medical Centre, New York, for other material on exchange.

J. G. JOHNSON,
Honorary Librarian.

Museum.

Progress is being made in the establishment of the museum which will house the valuable historical material in the possession of the Branch, and during the year two unique gifts were received, one (from Dr. David Roseby) being the original petition presented to Governor Gipps for the establishment of a Medical Board in Melbourne, and, secondly, two ancient Egyptian figurines, the gift of Dr. Walter Summons. It is hoped that others will follow the example of these two members.

H. BOYD GRAHAM,
Honorary Curator.

Reports of Subdivisions.

Metropolitan.

Western Suburban.—Office bearers: Branch Council representative, Dr. M. H. Box; Chairman, Dr. M. H. Box; Honorary Secretary, Dr. Donald D. Coutts.

One meeting of the subdivision was called during the year. This was to discuss instructions issued by the Hospitals and Charities Commission concerning the keeping of hospital records. It was addressed by Dr. H. G. Furnell and was well attended. After a lengthy discussion a resolution was passed recommending that the Council should not comply in any manner with the directions of the Hospitals and Charities Commission concerning the keeping of records of private and intermediate patients.

DONALD D. COUTTS,
Honorary Secretary.

South-Eastern Suburban.—The annual meeting of the subdivision was held at the Caulfield Town Hall on July 10, 1953, the following office bearers being elected for the coming year: President, Dr. G. E. Foreman; Vice-Presidents, Dr. S. G. Preston and Dr. R. D. Buntine; Honorary Secretary, Dr. G. W. Patterson. Dr. Donald Pryde was elected Council representative at the end of 1952.

During the meeting discussion regarding the Hospitals and Charities Commission requests to medical practitioners to keep records at state-aided hospitals took place and the following resolution was passed unanimously by the members present:

> That this special meeting of the members of the South-Eastern Subdivision of the Victorian Branch of the British Medical Association, having read and heard the explanations of the requests of the Hospitals and Charities Commission regarding the keeping of records and the right of doctors to attend private and intermediate patients in state-aided hospitals, endorses the view of the Council of the Branch. It agrees with the Council that the instructions of the Commission to hospital boards are opposed to public interest and it expresses its confidence in the Council in its handling of this matter.

The area that the subdivision covers was discussed at the meeting, and following this it was suggested that the next meeting be held at Frankston. This was held at the Frankston Hospital on October 22, 1953, at 9 p.m., when a discussion on pharmaceutical benefits and the Pensionor Medical Service took place.

G. W. PATTERSON,
Honorary Secretary.

Melbourne Central.—Office bearers: Council representatives, Dr. Leonard Ball, Dr. C. A. M. Renou and Dr. T. G. Swinburne; Chairman, Dr. A. E. Coates; Honorary Secretary, Dr. T. G. Swinburne.

No meetings of the subdivision were called during the year.

T. G. SWINBURNE,
Honorary Secretary.

Eastern Suburban.—Office bearers: Branch Council representative, Dr. H. G. Judkins; Chairman, Dr. John Begg; Honorary Secretary, Dr. H. J. Hosking.

One meeting was held during the year. Dr. Glyn White spoke on "Prematurity" and Dr. H. C. Colville opened a discussion on the staffing of the Box Hill Hospital. The introduction of Sir Earle Page's health scheme was also a subject of discussion.

H. J. HOSKING,
Honorary Secretary.

Southern Suburban.—Office bearers: Branch Council representative, Dr. G. R. Weigall; Chairman, Dr. D. Zacharin; Honorary Secretary, Dr. Norman L. Speirs.

The subdivision has not had a meeting since January 9, 1952.

NORMAN L. SPEIRS,
Honorary Secretary.

South Central Suburban.—Office bearers: Branch Council representative, Dr. J. Gavin Johnson; Chairman, Dr. R. D. Aitchison; Honorary Secretary, Dr. R. D. Wilson.

Two meetings of the subdivision were held since the last annual report.

At the first, on November 13, 1952, an address was given by Dr. Charles Byrne on the National Health Scheme. A discussion followed and it was resolved:

> That this subdivision wishes to draw the attention of the Branch Council to the encroachment on general practice by:
>
> 1. Tuberculosis centres and chest clinics.
>
> 2. Accident clinics, particularly when conducted at a public hospital.
>
> 3. The possibility of new hospitals being closed to members in private practice.
>
> 4. The practice of large companies referring accident cases direct to public hospitals.

At the second meeting, held on May 28, 1953, Dr. Leonard Ball gave an address on the dispute with the Hospitals and Charities Commission and on the position regarding medical records of private patients generally. A resolution was carried confirming the attitude of the Branch Council.

At the same meeting another resolution was passed concerning the use of nameplates indicating that examinations such as X ray and electrocardiography were carried out, and a letter was sent to the Branch Council pointing out that this practice was increasing. The Council did not take any action because experience in the past had shown that the policing of a rule restricting the wording of nameplates was impossible.

R. D. WILSON,
Honorary Secretary.

Country.

Gippsland.—Office bearers: Branch Council representative, Dr. A. B. Hewitt; substitute representatives, Dr. J. M. Andrew and Dr. D. I. Fitzpatrick; Chairman, Dr. J. M. Andrew (*in absentia*); Vice-Chairman, Dr. G. B. Baldwin to act in Dr. Andrew's absence; Honorary Secretary, Dr. John Gooch.

Two meetings of the subdivision were held since the last annual report.

On November 15, 1952, a meeting at which eighteen members were present was held at Sale, the afternoon being devoted to a clinical meeting at the Gippsland Hospital. Following the election of office bearers in the evening, Dr. T. H. Steel delivered a lecture on "Medical Emergencies in General Practice".

On June 9, 1953, an extraordinary meeting was held at Morwell and sixteen members attended. The action of the Branch Council in regard to the Hospitals and Charities Commission directives relating to medical records was endorsed. At the same meeting it was decided to recommend to the Branch Council that steps should be taken to terminate honorary medical service in country hospitals and that the feelings of the other country subdivisions be tested in this regard.

On April 18 and 19, 1953, a week-end meeting was arranged by the Melbourne Permanent Post-Graduate Committee at Sale.

J. M. GOOCH,
Honorary Secretary.

North-Western Country.—Office bearers: Council representative, Dr. W. J. Flanagan; substitute representatives, Dr. A. Hinchley and Dr. B. Hutton-Jones; Chairman, Dr. G. Forsyth; Honorary Secretary, Dr. A. L. Bridge.

No meetings of the subdivision were held, but a circular on the question of honorary service to public hospitals was directed to each member of this widely flung subdivision in order to get a more representative opinion than could be obtained by a meeting which might not be well attended.

Twelve answers were received. Nine favoured continuation of honorary service and two considered that it should be discontinued.

Seven members practising in Horsham were approached directly. All were of the opinion that honorary service should be discontinued. Contributors to health schemes should be charged according to a scale laid down and a means test applied to non-contributors.

Of the letters received three favoured payment directly by the patient. This would entail the application of a type of means test. In four replies the view was taken that the doctor should be paid for service given to individual patients, on the lines of the Earle Page scheme, rather than at a flat rate for staff as is practised in the United Kingdom.

ALAN BRIDGE,
Honorary Secretary.

South-Western Country.—Office bearers: Branch Council representative, Dr. W. R. Angus; substitute representatives, Dr. L. T. Griffiths and Dr. B. S. Alderson; Chairman, Dr. A. E. Brauer; Vice-Chairman, Dr. G. Watson and Dr. L. Westacott; Honorary Secretary, Dr. W. R. Angus; Assistant Honorary Secretary, Dr. B. D. Vaughan; Committee, Dr. D. I. Fitzpatrick, Dr. H. Maling, Dr. C. B. Berrymann, Dr. J. K. Gardner and Dr. B. Vaughan.

A successful week-end post-graduate meeting was held at Warrnambool on November 22 and 23, with an attendance of 33 members.

On March 28 a Branch meeting was held at Hamilton at which 40 members were present. Dr. Howard Russell delivered a lecture entitled "Some Thoraco-Abdominal Conditions".

At the ordinary one-day meetings lectures on a variety of subjects were given including: "The Impact of the National Health Act on General Practice", by Sir Allen Daley; "Reminiscences of General Practice", by Dr. H. I. Holmes; "The Difficult Appendix", by Dr. R. S. Lawson; "Anæmias", by Dr. DeGruchy; "Obstetrical Emergencies", by Dr. K. Churches.

The average attendance at meetings was 22.

Discussions at meetings dealt with the following items of business: scale of fees; extension of pathological diagnostic facilities in the subdivision; hospital records; friendly societies and the honorary medical system in country hospitals. The general interest in the affairs of the subdivision has been maintained, but even a larger attendance of members from a roll of 62 would be an improvement.

ROY ANGUS,
Honorary Secretary.

Ballarat.—Office bearers: Branch Council representative, Dr. M. Robinson; substitute representative, Dr. G. T. James; Chairman, Dr. M. Robinson; Vice-Chairman, Dr. G. R. Davidson; Honorary Secretary, Dr. J. P. L. Griffiths; Honorary Treasurer, Dr. P. G. Smith; Local Council, Dr. E. R. G. Sheil, Dr. W. T. Greening, Dr. D. Skewes, Dr. G. Pern and Dr. C. Richardson.

No meetings of the subdivision were held during the year.

J. P. L. GRIFFITHS,
Honorary Secretary.

Geelong.—Office bearers: Branch Council representative, Dr. D. A. Carter; substitute representatives, Dr. H. Millikan and Dr. D. A. Kidd; Chairman, Dr. J. M. Agar; Vice-Chairman, Dr. A. R. Moreton; Honorary Secretary, Dr. H. T. Day; Treasurer, Dr. E. I. Fargie; Librarian, Dr. Mary DeGaris; Library Subcommittee, Dr. J. M. Agar, Dr. C. W. Gale, Dr. J. P. Robinson; Hospital Advisory Board representative, Dr. R. Hyett; British Medical Association Subcommittee, Dr. D. A. Kidd, Dr. M. W. Morris, Dr. J. D. Reid.

Quarterly meetings were held on the following dates: December 9, 1952, March 10, 1953, June 16, 1953, and September 15, 1953.

H. T. DAY,
Honorary Secretary.

Bendigo.—Office bearers: Branch Council representative, Dr. P. Goodman, and on his retirement on account of his leaving the subdivision, Dr. E. Sandner; substitute representatives, Dr. E. Sandner and Dr. T. Jenkins; Chairman, Dr. N. N. Harrington; Vice-Chairman, Dr. E. Sandner; Honorary Secretary, Dr. P. E. Breheny; Honorary Treasurer, Dr. H. C. Purton.

Two one-day post-graduate meetings were held, in May and October. These were well attended, members coming from some of the more distant areas of the subdivision.

The visiting lecturers were entertained on each occasion at a dinner.

P. E. BREHENY,
Honorary Secretary.

Goulburn.—Office bearers: Branch Council representative, Dr. D. G. MacKellar; substitute representatives, Dr. D. Lally and Dr. R. O. Mills; Chairman, Dr. A. E. Dickmann; Honorary Secretary, Dr. Brian Schloeffel; Treasurer, Dr. A. F. Taylor.

Two post-graduate week-end meetings were arranged in conjunction with the Melbourne Permanent Post-Graduate Committee during the year.

The first was held at Shepparton on March 14 and 15 and the following lectures were given: Dr. J. M. Buchanan, "Prolapse with Special Reference to Stress Incontinence"; Dr. T. H. Steel, "Common Chest Conditions"; Dr. M. L. Powell, "Persistent Cough in Infancy and Childhood"; Dr. J. Woodward, "The Painful Neck and Shoulder".

The second meeting was held on July 18 and 19 at Shepparton, when the following lectures were given: Dr. C. N. DeGaris, "Modern Ideas in the Management of Pregnancy"; Dr. E. E. Dunlop, "Recent Advances in Surgical Practice"; Dr. J. G. Hayden, "The Management of Essential Hypertension"; Dr. J. Billings, "Common Neurological Problems".

A full programme of social activities for members and their wives was arranged in connexion with both meetings.

BRIAN SCHLOEFFEL,
Honorary Secretary.

Report of Sections.

Ear, Nose and Throat.—Office bearers: President, Dr. Denis O'Brien; Vice-President, Dr. Raymond Hennessy; Treasurer, Dr. Frank Shanasy; Secretary, Dr. Rory Willis. Hospital representatives: Royal Melbourne, Dr. G. Swinburne; Royal Children's, Dr. C. Pyman; Saint Vincent's, Dr. D. O'Brien; Alfred, Dr. Rex Blaubaum; Eye and Ear Hospital, Dr. R. H. Stevens.

Four meetings were held in the past twelve months. The first was a programme of selected clinical films obtained by Dr. Shanasy from the University of Sydney. The second was a meeting at which ten interesting clinical cases with very varied conditions were shown. The third was an address by Dr. G. A. D. McArthur entitled "Reminiscences of Forty Years"—a very pleasant mixture of medical and non-medical anecdotes with many illustrative slides. The fourth was an address by Professor A. Amies, Dean of the Dental School, University of Melbourne, the subject being "Clinical Recognition of Dental and Oral Conditions". This was a well-appreciated subject, beautifully illustrated by slides.

RORY WILLIS,
Honorary Secretary.

Industrial Medicine.—This Section was formed at a meeting on July 30, 1952, when the following office bearers were appointed: President, Dr. D. O. Shiels; Secretary, Dr. S. Crawcour; Treasurer, Dr. W. F. Cooper; committee members, Dr. L. J. Gurry, Dr. J. Frew, Dr. M. Rees and Dr. J. Gowland.

A general meeting was held on November 21, 1952, at which a paper was presented by Dr. D. O. Shiels on "Industrial Hazards in Industry".

At a committee meeting on April 21, 1953, it was reported that a prize to the value of £50 had been donated to the Section by Mr. Edgar Rouse, to be awarded for an essay by a fourth or fifth year medical student on "The Doctor's Role in Industry". The Faculty of Medicine at the University has since agreed to make arrangements for this.

A combined meeting of the Industrial Medicine Section and the College of Radiologists was held on April 21, 1953, when a paper by Dr. D. Thomas, of the Health Department, was presented on "Industrial Diseases of the Chest with Special Emphasis on Dust Diseases".

On June 16, 1953, a combined meeting of the Industrial Medicine Section and the Victorian Section of the British Association of Dermatology was held. The speakers were introduced by Dr. Ivan Connor, who spoke on "Certification and Litigation in Cases of Occupational Dermatitis", followed by papers by Dr. Ivan Wartzki, Dr. Staley and Dr. Clarke.

On August 18, 1953, a combined meeting of the Industrial Medicine Section and the Victorian Section of the Ophthalmological Society of Australia was held. Dr. Archie Anderson opened the discussion, mentioning many interesting cases of industrial eye injuries. Further papers were presented by Dr. Kevin O'Day and Dr. J. McBride White.

On October 19, 1953, Mr. R. A. Smithers, Q.C., addressed a meeting of the Section on "The Doctor in the Witness Box". He discussed medical evidence, medical certification and other medico-legal matters of interest to members.

S. CRAWCOUR,
Honorary Secretary.

The Ophthalmological Society of Australia (British Medical Association): Victorian Section.—Office bearers: President, Dr. W. D. Counsell; Secretary, Dr. John L. Bignell.

The following meetings were held:

February 3: General meeting and election of office bearers for the year.

April 23: Clinical meeting at the Victorian Eye and Ear Hospital, at which the presentation of cases was followed by clinical talks and discussions.

June 25: Business meeting for general purposes, including the election of representatives to the Adelaide meeting. A library subcommittee was formed, to be responsible for the safekeeping and management of the Ophthalmological Society of Australia Library.

August 18: Combined meeting with the Section of Industrial Medicine on "Aspects of Industrial Ophthalmology".

September 25: A clinical meeting was held at which Dr. T. a'B. Travers spoke on his recent trip to America.

October 21: A meeting was held at which Professor Weve, of Holland, and Mr. Philps, of St. Bartholomew's, London, spoke on ophthalmological subjects.

In conjunction with the Melbourne Permanent Post-Graduate Committee, the Society arranged a course of lectures in ophthalmology suitable for candidates for Part II of the Diploma of Ophthalmology (Melbourne).

JOHN L. BIGNELL,
Honorary Secretary.

Preventive Medicine.—Office bearers: Chairman, Dr. P. Gilbert; Secretary, Dr. R. J. Farnbach; committee members, Dr. S. G. Anderson, Dr. H. McLorinan and Dr. S. Ormerod.

Meetings of the Section have been held regularly throughout the year and the following speakers and subjects were presented: Sir Allen Daley, "The Health of the Nation"; Dr. Ian MacDonald, "Some Aspects of Preventive Medicine in General Practice"; Dr. Brian Clerehan, "Some Observations of Preventive Medicine"; Mr. F. Ratcliffe, "Myxomatosis: Recent Developments and Prospects"; Dr. K. G. Kerr, "Pulmonary Tuberculosis: The Changing Scene in Bendigo".

The meetings have been most interesting and informative and have been very well attended.

R. J. FARNBACH,
Honorary Secretary.

Radiology.—Office bearers: Chairman, Dr. C. R. Laing; Secretary, Dr. P. H. Davis; Assistant Secretary, Dr. G. Villiers.

The section has been active during the year, meetings having been held on the fourth Tuesday of each month.

The meetings, which were mainly scientific, were very well attended, especially by the younger members.

PETER DAVIS,
Honorary Secretary.

Section for the Study of Allergic Diseases.—Office bearers: Chairman, Dr. Charles Sutherland; Secretary-Treasurer, Dr. Alan Murray; Executive Members, Dr. R. H. O. Donald and Dr. J. B. Alexander.

There are seventeen members and the average attendance at meetings has been twelve.

Four meetings (quarterly) were held and subjects for discussion were: November, "Psychiatric Aspects of Allergic Diseases"; March, "Unusual Allergens"; May, "Vaccines of Use in the Treatment of Asthma"; August, "Penicillin Sensitivity".

The members feel that much has been gained through discussion of these subjects and look forward to another year of friendly association.

ALAN MURRAY,
Honorary Secretary.

On behalf of the Branch Council,

LEONARD BALL, President.
H. G. HILLER, Honorary Secretary.
C. H. DICKSON, Medical Secretary.

As the President of the Branch I wish to express my appreciation to those members of the Council who so willingly assisted me in the conduct of the Branch Office during the absence of the Medical Secretary overseas, and particularly to Miss Corley and the other members of the office staff who in no way spared themselves during that period.

LEONARD BALL,
President.

Addendum.

The following reports are published on behalf of:

The Melbourne Permanent Post-Graduate Committee.

Membership.—Dr. E. Graeme Robertson was appointed Chairman, Major-General F. Kingsley Norris Honorary Secretary and Dr. C. H. Dickson Honorary Treasurer of the committee. Mr. Anthony Kelly was appointed to the committee as representative of Saint Vincent's Hospital.

Courses for Higher Qualifications.—During the year the committee conducted courses in preparation for higher qualifications. For the first time a course suitable for candidates taking the Final Examination of the Fellowship of the Royal Australasian College of Surgeons was conducted by this committee, in place of that previously run by the College itself.

Country Courses.—Visits to the country centres revealed sustained interest in post-graduate education, both in the numbers attending and in the discussions which followed the lectures.

Overseas Lectures.—Dr. Macdonald Critchley and Dr. R. D. Lawrence, both of London, visited Melbourne early in the year, giving lectures and demonstrations to the profession in their specialties. Dr. Critchley lectured on the following subjects: "Headache", "Notorious Crimes", "The Body Image in Neurology" and "The Romance of Huntington's Chorea". He also conducted ward rounds and lectures at hospitals. Dr. Lawrence lectured on "Diabetes in General Practice". In June, Professor Joseph Barr, of Massachusetts General Hospital, lectured on "The Diagnosis and Treatment of Low Back and Sciatic Pain", illustrating with a motion picture on "Sciatic Pain and the Invertebral Disk". In August, Dr. Frank Gerbode, of Stanford University, California, after lecturing and participating in the discussions at the meeting of the Royal Australasian College of Surgeons in Sydney on mitral valvulotomy and experimental vascular surgery, visited Melbourne. Here he lectured on surgery of the œsophagus and, at the conclusion, screened a very instructive film on cardiac arrest. In February the committee was associated with the visit of Sir Allen Daley, formerly Chief Medical Officer of the London County Council.

Annual Subscription Scheme.—A scheme of subscription membership was instituted this year and appears to have gained wide and satisfactory support amongst members of the profession.

Numbers Attending Courses.—In 1953, 138 persons attended courses for higher qualifications, and 235 attended courses by lecturers from overseas. There were 12 at the gynæcology and obstetrics refresher course at the Women's Hospital, all in residence, and 124 attended the seven country courses for which reports have been received to date.

Arrangements for training overseas are made for Victorian graduates, through this committee, at the rate of fifty per year.

Directorate.—Dr. W. W. S. Johnston, the Director, was granted leave of absence to proceed overseas to the United Kingdom and the United States. He has travelled widely in Europe also and has made valuable inquiries and contacts on behalf of this committee.

The British Medical Insurance Company of Victoria, Limited.

The following is the annual report, over the signature of the chairman, Sir John Newman-Morris, submitted to members of the company at the ordinary general meeting held on Monday, July 13, 1953:

"The directors have pleasure in submitting for your approval the balance sheet, profit and loss account and appropriation account for the twelve months ended April 30, 1953.

"The results of the year's operations (as disclosed in the profit and loss account) have not, in the opinion of the directors, been materially affected by any items of an abnormal character.

"The total premiums written for the year were £73,861, as compared with £66,085 last year.

"Net profit for the year was £5243 0s. 10d., after providing £3000 for taxation.

"The appropriation account shows that £638 was allocated during the year to various institutions connected with the medical profession.

"Up to date the company has given books to the value of £2465 and £11,305 in cash to the Medical Society of Victoria, and more than £1150 to various sub-branches of the British Medical Association and other institutions connected with the medical profession. It has also taken up debentures of the Medical Society to the value of £3750, upon which it is accepting interest at the rate of only 1% *per annum*, which, of course, save the Medical Society a considerable sum in interest.

"The company has made the following loans to the Medical Society of Victoria: £3150, to finance a building purchase; £4000, to finance the purchase of an estate agency.

"The directors feel that members of the British Medical Association will be interested to know of the benefits that they have received through the activities of this company, and feel sure that the knowledge will strengthen the already solid support given by the profession.

"It is proposed to transfer £15,000 from appropriation account to reserve."

British Medical Agency of Victoria Proprietary, Limited.

The British Medical Agency completed another successful year with a higher net profit than previously recorded.

Provision of *locum tenens*, despite the increasing number of annual graduates, is more difficult than ever. Since the introduction of the system whereby residents do not leave their hospitals until February, the number of locums available in January, when the demand is much greater than any other month, is negligible.

Sales of medical practices continue despite the high price of houses, but cash transactions are rare, and the successful vendor usually offers terms to the purchaser.

Partnerships and group practice become more and more popular, not only because of the relief in every-day pressure of work, but also because the worry of obtaining *locum tenens* is obviated.

Directors appointed for the forthcoming year are Dr. C. H. Dickson, Dr. Douglas Thomas, Dr. G. S. Robinson and Major-General F. Kingsley Norris.

PRESENTATION OF GOLF TROPHIES.

The President announced the winners of the golf trophies: The Gerald Weigall Championship Cup, Dr. R. Munro; The David Roseby Handicap Cup, Dr. H. F. Tucker; Spoon for the best in-round, Dr. H. Jackson; Spoon for the best out-round, Dr. H. F. Tucker. He presented the tropies to Dr. Tucker. Dr. Munro and Dr. Jackson were not present.

INSTALLATION OF THE PRESIDENT FOR 1954.

Dr. Leonard Ball introduced the incoming President for 1954, Dr. G. R. Weigall, and installed him in the presidential chair. Dr. Weigall thanked the members for his election.

VOTES OF THANKS.

On the motion of Sir John Newman-Morris a vote of thanks was extended to Sir Victor Hurley, Dr. H. M. Box, Dr. K. Brennan, Dr. A. H. Melville, Dr. J. H. Lindell, Dr. D. D. Browne, Dr. P. Goodman and Dr. W. J. Flanagan.

Out of the Past.

In this column will be published from time to time extracts, taken from medical journals, newspapers, official and historical records, diaries and so on, dealing with events connected with the early medical history of Australia.

AGUE AT BRISBANE WATER.[1]

Colonial Secretary's Office,
21 November, 1844.

The Deputy Inspector-General of Hospitals.

Sir,

In transmitting to you the enclosed letter from the Rev. Edward Rogers respecting the prevalence of ague at Brisbane Water I am directed by His Excellency the Governor to request that you will cause a supply of medicine (but no Brandy) to be made up for Mr. Rogers, the cost of them to be charged to the Colonial Govt. The packet will probably not be too large for the Post, but if too large it may be sent through the Colonial Store Keeper.

I have, etc.,
W. ELYARD, JNR.

Correspondence.

DIFFUSE CARCINOMA OF THE BREAST.

SIR: It came as a surprise that one of Dr. Kinsella's stature should be so influenced by a recent prevailing tendency to an emotional type of criticism as to overstate his case so grossly (M. J. AUSTRALIA, December 12, 1953). He has ridiculed my aggressive surgical treatment of diffuse (inflammatory) carcinoma of the breast, stating that "the ineffectiveness of radical mastectomy in these cases has been well established". He also deplores my suggestion that the operation might with advantage have been more radical.

It is quite true that some authorities have regarded all such cases as inoperable. Prominent among these are Haagensen and Stout, who include inflammatory carcinoma in their well-known black list of 12 types. But in their recent review of the situation they have seen fit to shift ground in the case of carcinoma of pregnancy and lactation (in deference to the experience of others). Meanwhile further assaults are being made. Let us consider calmly the climate of opinion among some of the recognized leaders in this field during the last five years.

F. E. Adair, in his Moynihan Lecture in 1949, states: "One of the most common and inexcusable faults in the study of cancer cases is the selection of good cases to report on and the failure to report on the less favourable cases. . . . There is an enormous difference in clinics as to what constitutes an operable case of breast cancer. . . . Our own philosophy is to interpret operability along very generous standards. Realizing that there is no means of salvage to be compared with radical surgery, I am apt to give a patient the opportunity of a radical which in the hands of some clinicians would be denied. I believe this to be correct. . . . In the article by Haagensen and Stout (1943) criteria are given which they think indicate inoperability. . . . We fully agree that many of these criteria indicate a poor prognosis; but who has not been mistaken in his clinical estimate of a case? Who has not obtained a cure in a case when he had anticipated a failure? Pregnancy and lactation were also both contraindications for the radical operation in their list. Obviously, they offer a poor prognosis; but it is unthinkable to me, that every case of pregnancy or lactation accompanied by a breast cancer should be thrown out of consideration for cure. Anyone who carefully excludes from operation every case with an apparent poor prognosis should have a high percentage of cure. . . . I consider this not meeting our full responsibility as clinicians. . . . The frontiers of radical surgery have been pushed back and we, today, dare attempt operations which were previously denied us. . . . In fact the trend today is even toward more extensive surgery for cure and palliation."

T. G. Orr (1950), before the Chicago Surgical Society, states: "Under what circumstances is the operation for the removal of a scirrhous tumor of the breast proper, and under what circumstances is it improper?'. This question was asked by Sir Benjamin Brodie in the year 1865, more than 80 years ago. In the light of our present differences of opinion concerning the operability of certain carcinomatous lesions of the breast, we may truthfully say that Mr. Brodie's question is still very pertinent in the year 1949. . . . Knowing the great variability of the natural growth of carcinoma, with its unpredictable tendency to remain local or to metastasise early in certain cases, the rules of operation must be somewhat flexible and tempered with seasoned judgment. When the best examination possible is made and no extension of the tumor is found beyond the area which may be removed by the radical operation, the patient should be given the benefit of the doubt and operated on. This plan should be applied to all types of breast carcinoma, including the inflammatory type and those developing during pregnancy and lactation. If the criteria of Haagensen and Stout are followed strictly, a small percentage of patients may be denied the possibility of a cure. . . . Fewer patients treated by operation and a greater number treated by palliation, will not contribute much to the improvement of the over-all problem of breast cancer. . . . To champion one method of treatment . . . to the exclusion of all others may smack of dogmatism, and dogmatism never does much toward the solving of scientific problems."

Meyer, Dockerty and Harrington (1948), from the Mayo Clinic, found 74 cases of inflammatory carcinoma in 7000 cases of breast carcinoma (about 1% incidence). They state: "Sixty-three of the 74 patients underwent mastectomy. In 61 cases radical mastectomy was performed. . . . In 10 of the 11 cases in which the condition was inoperable because of obvious spread beyond the limits of surgical excision, rœntgen therapy was given. . . . In our series surgical treatment was employed in all cases in which the lesion had not obviously spread beyond the limits of excision. The fact that 3 patients survived for 5 years after operation would seem to justify this type of therapy. . . . One was alive 9 years after operation."

Marshall and Hare (1951, Lahey Clinic) state: "We have not attempted to confine our treatment to a selective group of cases that would present a more favourable prognosis, but have employed radical operation in all cases in which the cancer was still confined to the breast and to the corresponding axilla. In fact subsequent pathologic examination of axillary nodes was positive for axillary extension in 62% of the cases. The only contra-indication to radical surgery was evidence of distant metastatic spread, involvement of the pleura, of the lungs, bones or extension to the supraclavicular region."

These extracts surely make it clear that I am not alone in my belief that an attempt at salvage should be made in these cases, always provided there is no evidence of remote spread. Even in the failed cases no very great harm has been done. Life may be shortened by a few months. Lymphœdema of the arm is more common. On the credit side there is the satisfaction to all concerned that the patient has been afforded the best known chance of survival. She is rid of the obvious cancer, and she is unlikely to have skin ulceration and infection.

It is not as though the alternative of palliative treatment were in any way attractive. Although a patient may fear an operation for cancer, in my view she is much more fearful if abandoned. The "subcaustic" doses of radiotherapy are not likely to have any real effect on a heavy diffuse breast. The effects of hormone therapy are variable, transitory, and may have disturbing side-effects such as, for example, hirsutism. There are many reasons why the operation of castration is still *sub judice* (after more than fifty years' trial), not the least of which is that some surgeons, myself included, hesitate to add a sudden artificial menopause to the patient's woes at such a time.

Finally there is a big chance that under such treatment the patient may suffer most distressing local symptoms, such as ulceration, infection and foul discharge. The patient described in my original report survived seventeen months from the date of the first operation. Se was free from all local signs of the disease (except lymphœdema) and died fairly suddenly after dyspnœa for three days. Had we operated a month earlier it cannot be denied that she might have survived much longer.

The trend of today is to extend the scope of surgery, with the ultraradical mastectomy, division of clavicle and ribs, excision of axillary vein, dissection of cervical glands and removal of opposite breasts. Although one naturally deplores

[1] From the original in the Mitchell Library, Sydney.

such extremes, the fact is that the five-year survival rate has recently shown the first significant increase since Halsted, with more patients in the operable class. Could it be that Dr. Kinsella in his counsel of despair may soon be a lonely authority?

Yours, etc.,

J. M. YEATES.

135 Macquarie Street,
Sydney,
January 19, 1954.

References.

ADAIR, F. E. (1949), "Surgical Problems Involved in Breast Cancer", *Ann. Roy. Coll. Surgeons England*, 4: 360.

MARSHALL, S. F., and HARE, H. F. (1951), "Carcinoma of the Breast", in "Surgical Practice of the Lahey Clinic", Saunders, Philadelphia, 614.

MEYER, A. C., DOCKERTY, M. B., and HARRINGTON, S. W. (1948), "Inflammatory Carcinoma of the Breast", *Surg., Gynec. & Obst.*, 87: 417.

ORR, T. G. (1950), "An Attempt to Evaluate the Radical and Palliative Treatment of Breast Carcinoma", *Surg., Gynec. & Obst.*, 90: 413.

MEDICO-LEGAL SOCIETY OF NEW SOUTH WALES.

SIR: The above-mentioned society, after holding a few meetings, appears to have suspended its activities. I have received no notice for over two years. Would someone kindly inform me whom I might approach with a view to reviving the society?

Yours, etc.,

W. S. DAWSON.

Sydney,
January 19, 1954.

ITEMS OF MEDICO-HISTORICAL INTEREST.

SIR: At a recent meeting of the Section of Medical History (Victorian Division), I was directed to bring to the notice of as many practitioners and institutions as possible the section's desire to collect, preserve and index items of medico-historical interest held in Victoria. These may be taken to include, notably, books, documents, manuscripts and instruments of historical interest. Where practicable, this material would be placed in the museum, of which Dr. H. Boyd Graham is curator, or alternatively, its existence and whereabouts would be recorded so that it may be available for reference. Doubtless there is much valuable material lying forgotten in numerous store rooms, and on request a member of the section would be pleased to advise in regard to its historical worth and appropriate disposal.

It was felt that a letter in your columns would reach practitioners outside Melbourne who could assist, perhaps particularly by drawing the matter to the attention of local hospitals and institutions. Your cooperation would be greatly appreciated.

Yours, etc.,

BRYAN GANDEVIA,
Honorary Secretary, Section of Medical History, Victorian Branch, British Medical Association.

50 Aroona Road,
North Caulfield,
Victoria.
January 14, 1953.

Obituary.

FREDERICK MARTINDALE BLACKWOOD.

WE are indebted to Dr. E. Morris Humphrey for the following appreciation of the late Dr. Frederick Martindale Blackwood.

Dr. Frederick Martindale Blackwood died on Friday, November 20, 1953, a few days after his ninetieth birthday. He was one of the last remaining representatives of that race of family practitioners the like of whom we shall not see again.

His wide knowledge of medicine, always kept up to date, and his untiring energy in spite of disabilities, the result of several serious illnesses, put him in the top rank as a consultant when confrères found themselves in difficulties, and I can still picture him with his quiet confidence-inspiring bedside manner; after a thorough examination he would look over his glasses and, in that diffident manner so frequently adopted by those steeped in sound knowledge, say, "I think it is so and so", and one would realize that he had hit the mark unerringly.

In Blackwood's early days the only scientific aids to medicine were the stethoscope, thermometer and obstetric forceps, and gradually as various instruments and drugs came along he regularly made himself *au fait* with the new methods, unlike many of his day who distrusted the new-fangled ideas.

Blackwood obtained his M.D. at the University of Durham, and came to Australia and settled in Cooma, where there was much activity in connexion with the construction of the railway which eventually was extended to Bombala and Nimmitabel. Here he was initiated into the adventures and experiences of a country practice in the early days, and many were the tales he could relate of his pioneering exploits.

After several years of successful practice he moved to Summer Hill and joined Dr. Collingwood in partnership. Later Dr. E. T. Thring became a partner until he moved into Macquarie Street, where for some years he was one of the leading gynæcologists. Dr. J. J. Kelly then came into the "firm" until he in turn went into the "Street" as a throat, nose and ear specialist in the days before they became known by the more highfalutin title of today.

Collingwood's end was tragic. He decided to take a trip to England. He was a keen chess player and on the ship met a passenger, also a chess addict, who was a victim of pulmonary tuberculosis. The danger of constant proximity to a tuberculosis patient was not realized at that time, and the two sat opposite to each other at a small table engrossed in their games for the greater part of the voyage, with the inevitable result that Collingwood became severely infected and only survived a few months after his ill-fated holiday.

Soon afterwards Blackwood moved to Turramurra in the newly opened up North Shore district and quickly became well established in an area extending from Hornsby to Mosman. I came from Lismore shortly before World War I and took over a practice in Hornsby, renewing my acquaintance with Blackwood from the Summer Hill days, where I had lived years before; he invited me to join him as a partner, which I gladly accepted, and we worked together in great friendship until I went overseas.

To save any complications in the event of anything happening to either of us, we decided to dissolve our partnership and reconsider it when the war would be over. On my return I found that Blackwood had aged considerably owing to the strain of extra work, and he decided to slack up with a view to retiring; so we still worked together as before, though not sharing in the proceeds of the practices.

With all his wide reading he had an excellent memory and a wonderful sense of humour in his quiet way, and his naïve way of relating incidents made him a most cheerful and delightful companion. He not only was the family doctor, but usually became a firm friend of those whom he looked after.

The younger generation of today can have no idea of what a country practice was like in those times, many miles through bush tracks, mostly on horseback, day or night, wet or fine, and at the end of the trail having to treat patients under the most primitive conditions.

During the last couple of years of his life Blackwood had the misfortune to suffer a fractured femur, which prevented him from getting about, but his enforced idleness did not depress him; he still enjoyed his books and always gave me a cheerful welcome and a *bon mot* whenever I looked him up.

He was one of whom it can truly be said that he made the world a better place for those who were in his circle of friendship, and they were many.

Dr. Eric P. Blashki writes: Permit me to say farewell to a valued friend, Frederick Martindale Blackwood, who passed away full of years recently at Killara. He was a fine example of a general practitioner, combining patience and wisdom with knowledge. There could be few kinder or more considerate colleagues, and like many others I found his help a great comfort and support when, as a neophyte in practice, I first made his acquaintance. Coming to Australia for health reasons after graduation at Durham, Blackwood served as medical officer to the railway construction camps in the Cooma district and settled there in practice. Later he went to Summer Hill and thence to Turramurra, where

he enjoyed a large following. Having retired from the active position of honorary physician at the Royal North Shore Hospital of Sydney, he was consulting physician to that institution for nearly thirty years—so long that there are few left to remember him. But those who knew "Blackie" will hold him in affectionate memory.

Naval, Military and Air Force.

APPOINTMENTS.

THE undermentioned appointments, changes *et cetera* have been promulgated in the *Commonwealth of Australia Gazette*, Number 1, of January 7, 1954.

CITIZEN NAVAL FORCES OF THE COMMONWEALTH.

Royal Australian Naval Reserve.

Appointment.—Peter Francis Gill is appointed Surgeon Lieutenant, dated 23rd October, 1953.

AUSTRALIAN MILITARY FORCES.

Australian Regular Army.

Royal Australian Army Medical Corps.

To be Captain, 22 February, 1952, with a Shirt Service Commission for a Period of One Year.—2/40164 Hugh Cairns Anderson (in lieu of the notification respecting NX700351 Hugh Cairns Anderson which appeared in Executive Minute No. 51 of 1952, promulgated in *Commonwealth Gazette*, No. 31, of 1952).

To be Captain, 23rd November, with a Short Service Commission for a Period of One Year.—1/8056 Geoffrey Laurence Wadeson.

The Short Service Commission granted to 2/40164 Captain H. C. Anderson is extended to 2nd April, 1953.

2/40164 Captain H. C. Anderson is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (2nd Military District), 3rd April, 1953 (in lieu of the notification respecting NX700351 Captain H. C. Anderson which appeared in Executive Minute No. 94 of 1953, promulgated in *Commonwealth Gazette*, No. 37, of 1953).

Interim Army.

Royal Australian Army Medical Corps.

VX700260 Captain (provisionally) F. G. Silberberg relinguishes the provisional rank of Captain and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (3rd Military District) in the honorary rank of Captain, 1st March, 1952.

Citizen Military Forces.

Northern Command: First Military District.

Royal Australian Army Medical Corps (Medical).—The date of appointment of 1/61802 Captain (provisionally) J. Breinl which appeared in Executive Minute No. 253 of 1952, promulgated in *Commonwealth Gazette*, No. 3, of 1953, is amended to read "26th February, 1952".

1/25512 Captain P. W. Leslie is appointed from the Reserve of Officers, 17th August, 1953. The provisional appointment of 1/39131 Captain B. S. Purssey is terminated, 14th November, 1953. To be Captain (provisionally), 15th November, 1953: 1/39131 Brian Swan Purssey, and is seconded for post-graduate studies in the United Kingdom.

The following officers cease to be seconded for post-graduate studies in the United Kingdom: 1/10316 Captain H. W. A. Forbes, 5th October, 1953, and 1/61769 Captain (provisionally) L. J. Lowth, 14th November, 1953. The provisional appointment of 1/61769 Captain L. J. Lowth is terminated, 14th November, 1953.

The provisional rank of 1/32977 Captain I. D. Forbes is confirmed. 1/25222 Captain (provisionally) B. Bruce-Smith is seconded for post-graduate studies in the United Kingdom, 10th August, 1953. The provisional appointment of 1/25222 Captain B. Bruce-Smith is terminated, 14th November, 1953. To be Captain (provisionally), 15th November, 1953: 1/25222 Bruce Bruce-Smith, and is seconded for post-graduate studies in the United Kingdom.

Eastern Command: Second Military District.

Royal Australian Army Medical Corps (Medical).—2/127030 Captain (provisionally) C. A. Shearer is seconded for post-graduate studies in United Kingdom, 14th March, 1953; 2/127014 Captain (provisionally) F. H. Burns relinquishes the provisional rank of Captain and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (2nd Military District) in the honorary rank of Captain, 18th September, 1953.

The provisional rank of 6/9022 Captain J. Oliver is confirmed. 2/167654 Captain L. L. Nordstrom is appointed from the Reserve of Officers, 15th September, 1953. 2/50450 Lieutenant-Colonel R. Drummond, M.B.E., is placed upon the Retired List (2nd Military District) with permission to retain his rank and wear the prescribed uniform, 1st October, 1953.

The provisional rank of 2/75650 Captain H. P. B. Harvey is confirmed. 2/75650 Captain H. P. B. Harvey is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (2nd Military District), 16th October, 1953. 2/127043 Captain (provisionally) A. R. Doutreband relinquishes the provisional rank of Captain and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (2nd Military District) in the honorary rank of Captain, 9th October, 1953. To be Captain (provisionally), 19th November, 1953: 2/116133 George Edwardes Cummins.

Southern Command: Third Military District.

Royal Australian Army Medical Corps (Medical).—3/114217 Honorary Captain K. H. McLean is appointed from the Reserve of Officers, and to be Captain (provisionally), 2nd October, 1953. The following officers relinquish the provisional rank of Captain and are transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (3rd Military District) in the honorary rank of Captain: 3/58519 E. J. Wellsted, 29th August, 1953, and 3/87148 W. L. Jenkins, 23rd September, 1953. 3/101811 Major T. K. Durbridge is appointed to command 4th Field Ambulance and to be Temporary Lieutenant-Colonel, 29th August, 1953.

Central Command: Fourth Military District.

Royal Australian Army Medical Corps (Medical).—To be Captain (provisionally), 9th November, 1953: F4/1099 Elizabeth Maurine Prest.

Western Command: Fifth Military District.

Royal Australian Army Medical Corps (Medical).—The following officers are appointed from the Reserve of Officers, and to be Captains (provisionally): Honorary Captains 5/26523 G. R. A. Raad, 13th October, 1953, and 5/26524 R. F. Forkin, 15th October, 1953.

The provisional rank of 5/15975 Captain D. C. Foster is confirmed.

Tasmania Command: Sixth Military District.

Royal Australian Army Medical Corps (Medical).—The provisional ranks of the following officers are confirmed: Captains 6/15408 J. N. Naylor and 6/15233 K. G. Ball. 6/15233 Captain K. G. Ball is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical) (6th Military District), 31st August, 1953 (in lieu of the notification respecting this officer which appeared in Executive Minute No. 182 of 1953, promulgated in *Commonwealth Gazette*, No. 70, of 1953).

Reserve Citizen Military Forces.

Royal Australian Army Medical Corps.

2nd Military District. — The notification respecting Honorary Captain K. H. Mackey which appeared in Executive Minute No. 171 of 1953, promulgated in *Commonwealth Gazette* No. 64 of 1953, is withdrawn. The resignation of Honorary Captain W. T. Calov of his commission is accepted, 12th October, 1953. To be Honorary Captains: David Alexander Sugerman, 26th October, 1953, Paul Apostle Limbers, 9th November, 1953, and Peter John Geddes, 25th November, 1953.

3rd Military District.—The resignation of Honorary Captain D. V. Rodda of his commission is accepted, 18th October, 1953. To be Honorary Captains, 10th October, 1953: Ben MacMahon Wadham and Sydney Evan Hughes.

5th Military District.—The resignation of Captain H. J. C. Hanrahan of his commission is accepted, 21st September, 1953. To be Honorary Captain, 12th September, 1953:

DISEASES NOTIFIED IN EACH STATE AND TERRITORY OF AUSTRALIA FOR THE WEEK ENDED JANUARY 2, 1954.[1]

Disease.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Australian Capital Territory.	Australia.
Acute Rheumatism	..	..	..	..	1(1)	..	..	..	1
Amœbiasis	..	1(1)	..	..	..	..	..	..	1
Ancylostomiasis	..	..	..	..	..	..	..	..	..
Anthrax	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..
Brucellosis	..	1(1)	..	..	..	..	..	..	1
Cholera	..	..	..	..	..	..	..	..	..
Chorea (St. Vitus)	..	..	..	..	..	..	..	..	..
Dengue	..	..	..	..	..	..	..	..	..
Diarrhœa (Infantile)	4(4)	2(1)	8(7)	..	..	..	..	..	14
Diphtheria	6(5)	3(2)	..	..	7(7)	..	..	..	16
Dysentery (Bacillary)	..	1	2(2)	..	..	..	..	..	3
Encephalitis	..	..	1	..	..	..	..	..	1
Filariasis	..	..	..	..	..	..	..	..	..
Homologous Serum Jaundice	..	..	..	..	..	..	..	..	..
Hydatid	..	..	..	..	..	..	..	..	..
Infective Hepatitis	..	10(3)	..	..	2	..	1	..	13
Lead Poisoning	..	..	..	..	..	..	..	..	..
Leprosy	..	..	1	..	..	..	..	..	1
Leptospirosis	..	..	..	..	..	..	..	..	..
Malaria	..	..	..	..	..	..	..	..	..
Meningococcal Infection	..	..	..	..	1(1)	..	..	..	1
Ophthalmia	..	..	..	..	..	..	..	..	..
Ornithosis	..	..	..	..	..	..	..	..	..
Paratyphoid	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..
Poliomyelitis	16(10)	..	..	..	4(2)	..	..	..	20
Puerperal Fever	..	..	..	..	..	..	..	..	..
Rubella	..	2(2)	..	..	31(28)	..	2	..	35
Salmonella Infection	..	..	..	..	..	..	..	..	..
Scarlet Fever	8(5)	14(8)	6(3)	..	..	1	..	..	29
Smallpox	..	..	..	..	..	..	..	..	..
Tetanus	..	..	2(2)	..	..	..	1	..	3
Trachoma	..	..	..	..	..	..	..	..	..
Trichinosis	..	..	..	..	..	..	..	..	..
Tuberculosis	17(13)	15(7)	1	..	4(4)	3(2)	..	..	40
Typhoid Fever	1(1)	..	..	..	..	..	..	..	1
Typhus (Flea-, Mite- and Tick-borne)	..	..	2(2)	..	1(1)	..	..	..	3
Typhus (Louse-borne)	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..

DISEASES NOTIFIED IN EACH STATE AND TERRITORY OF AUSTRALIA FOR THE WEEK ENDED JANUARY 9, 1954.[1]

Disease.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Australian Capital Territory.	Australia.
Acute Rheumatism	4(2)	..	..	..	..	..	..	..	4
Amœbiasis	..	..	..	..	..	..	..	..	..
Ancylostomiasis	..	..	..	..	..	..	1	..	1
Anthrax	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..
Brucellosis	..	1(1)	..	1	..	..	..	..	2
Cholera	..	..	..	..	..	..	..	..	..
Chorea (St. Vitus)	..	..	..	..	..	..	..	..	..
Dengue	..	..	..	..	..	..	..	..	..
Diarrhœa (Infantile)	9(7)	4(4)	11(11)	..	..	..	2	..	26
Diphtheria	6(3)	1(1)	..	..	7(5)	..	..	..	14
Dysentery (Bacillary)	..	..	1(1)	..	..	..	..	..	1
Encephalitis	1	..	..	..	..	..	..	..	1
Filariasis	..	..	..	..	..	..	..	..	..
Homologous Serum Jaundice	..	2	..	..	..	..	..	..	2
Hydatid	..	..	..	..	..	..	..	..	..
Infective Hepatitis	..	7(4)	..	..	3	..	..	..	10
Lead Poisoning	..	..	..	..	..	..	..	..	..
Leprosy	..	..	..	..	..	..	..	..	..
Leptospirosis	..	..	..	..	..	..	..	..	..
Malaria	..	..	..	..	..	..	..	..	..
Meningococcal Infection	2	1	..	..	..	2	..	..	5
Ophthalmia	..	..	..	..	..	..	..	..	..
Ornithosis	..	..	..	..	..	..	..	..	..
Paratyphoid	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..
Poliomyelitis	22(16)	3(2)	..	2	1	..	..	..	28
Puerperal Fever	1	..	1	..	..	..	..	..	2
Rubella	..	16(5)	..	..	23(16)	..	..	..	39
Salmonella Infection	..	..	..	..	..	..	..	..	..
Scarlet Fever	8(5)	28(15)	8(6)	2(2)	2(2)	1	..	..	49
Smallpox	..	..	..	..	..	..	..	..	..
Tetanus	..	..	..	..	..	..	..	..	..
Trachoma	..	..	..	..	..	..	..	..	..
Trichinosis	..	..	..	..	..	..	..	..	..
Tuberculosis	24(16)	37(31)	7(3)	18(10)	1(1)	6	1	..	94
Typhoid Fever	..	..	1(1)	..	..	..	..	..	1
Typhus (Flea-, Mite- and Tick-borne)	2(1)	..	2(1)	..	..	..	..	..	4
Typhus (Louse-borne)	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..

[1] Figures in parentheses are those for the metropolitan area.

Graham Raymond Albert Raad (in lieu of the notification respecting this officer which appeared in Executive Minute No. 195 of 1953, promulgated in *Commonwealth Gazette* No. 79 of 1953).

ROYAL AUSTRALIAN AIR FORCE.

Permanent Air Force: Medical Branch.

The probationary appointment of the following officers is confirmed: Flight Lieutenants D. C. Galbraith (025651) and K. W. F. Chambers (052758), Flying Officer W. J. Slaven (052749).

The short-service commission of Flight Lieutenant (Temporary Squadron Leader) A. V. Coleman (033029) is extended for a period of one year, 23rd September, 1954.

The resignation of Flight Lieutenant (Acting Squadron Leader) J. L. Struan-Marshall (035910) is accepted, 10th November, 1953.

Wing Commander G. C. V. Thompson (033034) is promoted to the rank of Group Captain.

Royal Australasian College of Surgeons.

RUPERT DOWNES MEMORIAL LECTURE.

ALLAN S. WALKER, M.D., F.R.A.C.P., Medical Historian of "Australia in the War, 1939-45", will deliver the Rupert Downes Memorial Lecture in the Stawell Hall, The Royal Australasian College of Physicians, 145 Macquarie Street, Sydney, on Wednesday, March 31, 1954, at 8.15 p.m. His subject will be "The Following Wind of History". All members of the medical profession are invited to attend.

Nominations and Elections.

The undermentioned have been elected as members of the South Australian Branch of the British Medical Association: Downing, Bruce Jacob, M.B., B.S., 1953 (Univ. Adelaide) (qualified 1952); Paull, Torrance Arnold, M.B., B.S., 1953 (Univ. Adelaide).

The undermentioned have been elected as members of the New South Wales Branch of the British Medical Association: Gendle, John Fuge, M.B., B.S., 1953 (Univ. Sydney); James, Vernon Allen, M.B., B.S., 1953 (Univ. Sydney); Kahn, Keith Burkitt, M.B., B.S., 1953 (Univ. Sydney); Ormsby, Jennifer Irwin, M.B., B.S., 1953 (Univ. Sydney); Robinson, James, M.B., B.S., 1953 (Univ. Sydney); Brown, Trevor John Gyton, M.B., B.S., 1951 (Univ. Sydney); Gillespie, Arthur Donald Francis, M.B., B.S., 1952 (Univ. Sydney); Murphy, Kevin Michael, M.B., B.S., 1952 (Univ. Sydney); van den Berg, Willem Jacob, M.D., 1952 (Univ. Groningen), registered in accordance with the provisions of Section 17 (*b*) of the *Medical Practitioners Act*, 1938-1950.

The undermentioned have been elected as members of the New South Wales Branch of the British Medical Association, and are all provisionally registered, 1954 (Univ. Sydney): Bennett, Andrew Gordon Gregory; Bernstein, Louis; Brady, Allan Jasper; Brake, Ian Terence; Cam, Donald Edmund: Campbell, Mary Stewart; Carr, Edwin William; Chapman, Maxwell James; Clarke, Frederick Brian Norton; Clarke, John Richmond; Dunlop, Ian Critchley; Ellis, Kenneth James; Fenwick, John; Firkin, Barry George; Florance, Brian; Goldrick, Robert Brian; Graham, Charles Edmund: Healey, Raymond Joseph; Hodgkinson, David William Taylor; Ireland, Desmond Joseph; Jones, Brian Edmund; Jones, Keith Oswald Atkins; Lark, Elizabeth Anne; Linegar, Valerie June; McCarthy, John Brian; McRae, James; Marshman, Raymond John; Massie, Hugh Hamon; Mishkel, Maurice Alan; Munro, Frank Edward; Musgrave, Paul Anthony Baker; Paczowsky, Johannes Robert; Pfeifer, Albert; Rivett, Howard Maitland; Sanderson, Erle Jack; Seidel, Ulric Paul; Shearman, Brian Thomas; Talley, Nicholas Alexander; Thompson, Ian Lyall; Waddy, Phyllis Mary; Wagner, Gerhard Richard; Warren, Agnes Grace; White, David Ogilvie; Young, Richard Vousden.

Deaths.

THE following death has been announced:

MARKS.—Alexander Hammett Marks, on January 18, 1954, at Brisbane.

Corrigendum.

IN the issue of January 30, 1954, there appeared an article by Professor T. K. Ewer entitled "Infertility in Livestock". Professor Ewer's name was incorrectly spelled and he was incorrectly named Professor of Veterinary Science instead of Professor of Animal Husbandry. We offer apologies to Professor Ewer for these errors.

Diary for the Month.

FEB. 9.—New South Wales Branch, B.M.A.: Executive and Finance Committee.
FEB. 12.—Queensland Branch, B.M.A.: Council Meeting.
FEB. 13.—Tasmanian Branch, B.M.A.: Annual Meeting.
FEB. 15.—Victorian Branch, B.M.A.: Finance Subcommittee.
FEB. 16.—New South Wales Branch, B.M.A.: Medical Politics Committee.
FEB. 17.—Victorian Branch, B.M.A.: Branch Meeting.
FEB. 18.—Victorian Branch, B.M.A.: Executive of Branch Council.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

New South Wales Branch (Medical Secretary, 135 Macquarie Street, Sydney): All contract practice appointments in New South Wales.

Victorian Branch (Honorary Secretary, Medical Society Hall, East Melbourne): Associated Medical Services Limited; all Institutes or Medical Dispensaries; Australian Prudential Association, Proprietary, Limited; Federal Mutual Medical Benefit Society; Mutual National Provident Club; National Provident Association; Hospital or other appointments outside Victoria.

Queensland Branch (Honorary Secretary, B.M.A. House, 225 Wickham Terrace, Brisbane, B17): Brisbane Associated Friendly Societies' Medical Institute; Bundaberg Medical Institute. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL or position outside Australia are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.

South Australian Branch (Honorary Secretary, 178 North Terrace, Adelaide): All Contract Practice appointments in South Australia.

Western Australian Branch (Honorary Secretary, 205 Saint George's Terrace, Perth): Norseman Hospital; all Contract Practice appointments in Western Australia. All government appointments with the exception of those of the Department of Public Health.

Tasmania: Part-time specialist appointments for the north-west coast of Tasmania.

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